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AMIGA MAGAZINE

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AMIGA MAGAZINE

SEPTEMBER 1997 • CONTENTS

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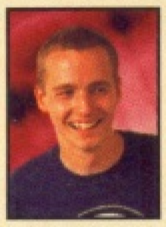
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COVER DISK AND CD-ROM DUPLICATION BY DISKXPRESS

ABC July-December 1997 28,161

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Editorial



We've had a lot of fun putting the mag together this month, not least with our Project XG sound card project (that's it below, the thing that looks like a bomb or something). This is just the first of many exciting projects we'll be presenting every month from now on, so brush up on your soldering technique! If the the rather more advanced 'soldering' of the NASA Pathfinder has had you enthralled recently, you'll appreciate this month's Vista Pro cover application, which allows you to explore Mars yourself, as well as rendering gloriously lush Earth landscapes into the bargain, and that's just the tip of this issue's iceberg.

Tony Horgan, Editor

DIY Scene



Problem: you want a sound card, but there isn't a decent one that fits your Amiga, your requirements and your budget. Solution: CU Amiga's DIY sound card, 'Project XG'. The boffins in the CU Amiga DIY research labs have unveiled a monster 18-bit sound card compatible with all Amiga's, featuring full General MIDI and XG compliance, on-board realtime Digital Signal Processors and a pass-through/mixer for your existing Amiga audio!

The best part is, all this will set you back just a little over £100! Starting on page 24, you'll find everything you need to know about this unique project.

Feature



Good things are happening on the Amiga games scene. New faces are appearing with some impressive games, while a network of distributors and publishers is forming to get these gems to the masses. After a year or two of making do with substandard entertainment, it looks like Amiga gamers are finally getting what they deserve: everything from flight sims to adventure games via Formula 1 arcade thrills. CU Amiga takes a look at the major players in this promising phoenix-like scene.

Feature



It's time to re-evaluate the Amiga's future. It's a tough world out there, and a next generation Amiga will have to be almost perfectly targeted, designed, marketed and priced if it's to succeed as it should.

We take a realistic look at what needs to stay, what has to go, and how it can steal a march on the current computing 'alternatives'. Not only that, for members of the soundbite culture we've also compiled our own list of 20 Ways to Save the Amiga.

News

Games

Tech Scene

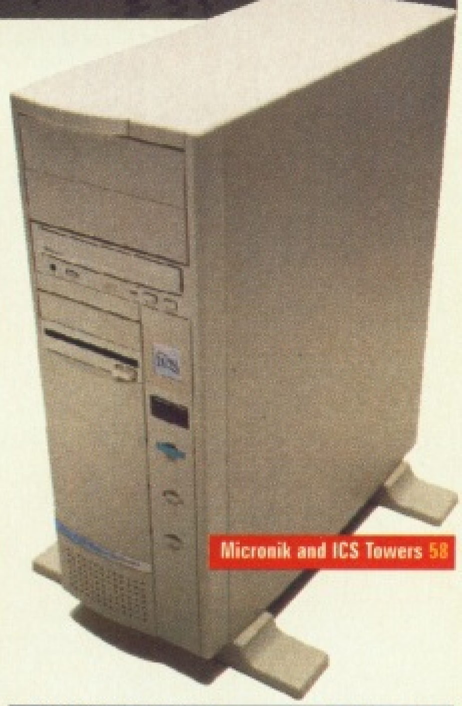
Workshop


Nemac IV 43

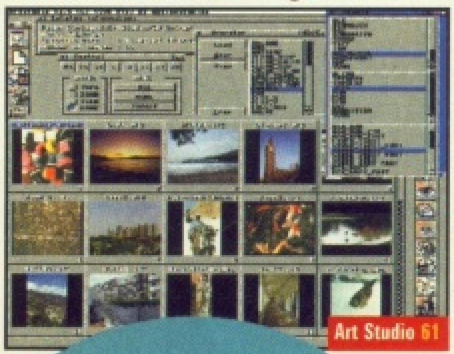

Flying High 44


Art Effect 2 50


Graphics tablets 54


Micronik and ICS Towers 58


ST Fax 62


Art Studio 61

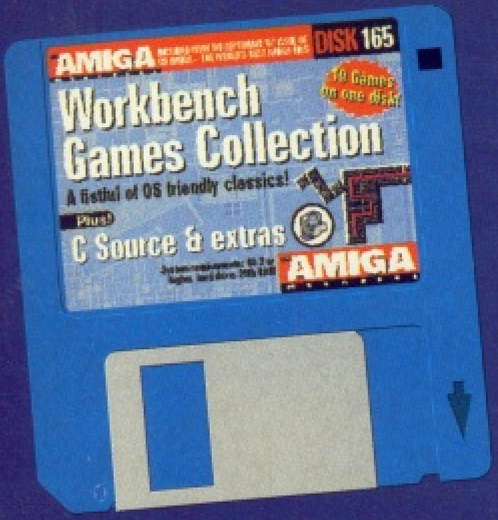
Cover disks







Workbench Games Collection

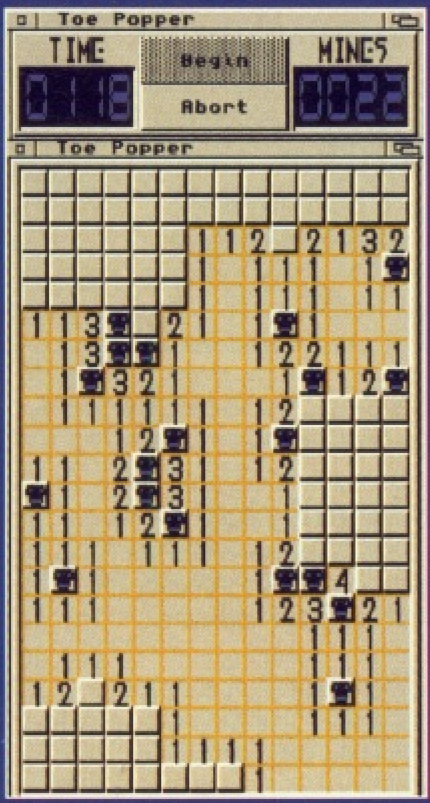


Sorry Floppy disk guys, no Sixth Sense for you, but at least we've got you a great collection of Workbench games to make up for it. Ten games on one disk!

There are 10 games in this collection, all of them designed to run on your workbench. Amongst the titles is an excellent mines game, a clever variant on the pipe laying theme and a Tetris. Go wild – open a huge screen and play 10 games at once!

Each game is accompanied by a text file giving you full instructions. Remember to read them all carefully. Also check out the readme files in the main SBL_WB_Games drawer – if you find yourself coming back to these games again and again, consider rewarding the programmers with the shareware fee! Each of these games run directly from Workbench and will happily multi-task, so now you can play and work simultaneously. There's even a little "eyes" hack in case you need an eye kept on your mouse pointer.





Loading Instructions

Sixth Sense runs straight from the CD. Just open the Sixth Sense drawer and click on the icon.

Floppy users will find an icon on disk 165 for the SBL games collection. Just click on it and choose where you want the games installed to. Follow any instructions about disk swapping that you are given and soon you'll have the collection de-archived and ready to run. Remember these games are Workbench games, so you'll need a Workbench for them to run on!

Sixth Sense Investigations





▲ **Working for the FBI, you get to rummage around dark warehouses with a great big torch. Working for Sixth Sense Investigations you get cartoon houses and dodgy coats. Ah well.**

If you have a CD-ROM, you've got a treat in store by the name of Sixth Sense Investigations. Sorry floppy users, but there really isn't enough space – the 6th Sense drawer on the CUCD is the size of 5 floppy disks, and besides the game is CD only, so it's not much use to you if you don't have a CD-ROM drive. Floppy users have a smaller but nevertheless rather excellent treat in the shape of the Silicon Based Lifeforms Workbench Games collection. CUCD owners can find their own copy of this in the standard games drawer on the CD. I know, I know, it's unfair, but what can we do?

Sixth Sense Investigations is a kind of cross between the X files and Ren & Stimpy. Your task, should you choose to accept it, is to lead the poor hapless PI on an investigation into all the spooky things that have been happening around his brightly coloured cartoon hometown. Alien abductions, giant robots, international illuminati conspiracies and kung-fu zombies, Sixth Sense Investigations are ready for them all – but can they save John O'Cheeser from a fate worse than processed Albanian cheddar?

The interface of SSI will be immediately familiar to anyone who has played Monkey Island or any other similar graphic adventure. Point with the mouse to where you want to walk and click the left button and you will walk there. Sometimes the pointer will automatically turn into another symbol, offering a suggestion of what you might want to do to whatever object the pointer is currently over. For instance an eye might appear when you pass over an interesting notice board, and a mouth might appear when the pointer crosses someone you might want to talk to. In these cases you can press the right mouse button instead of the left and your character will immediately perform that action.

You start off in the office of your detective agency. If you look carefully you will notice your telephone is ringing off the hook. Well go on, answer it! Click on the USE option in the menu at the bottom of the screen and then click on the phone. Read the spiel and you'll find out the nature of your quest. Go to the door – not forgetting to TAKE the BOTTLE on the way, and then OPEN the DOOR and go out... the city awaits!

A couple of tips will help you on your way. Scan the pointer around the room and look just under the view window. If you pass over any object the game recognises, you will see some text appearing here telling you its name. This is an easy way of telling when objects can be manipulated. Text going too slow? Hit the mouse button to jump through text. Final tip – SSI is available from Epic for £29.99. Contact Epic on 0500 131 466. ■

DISK 164

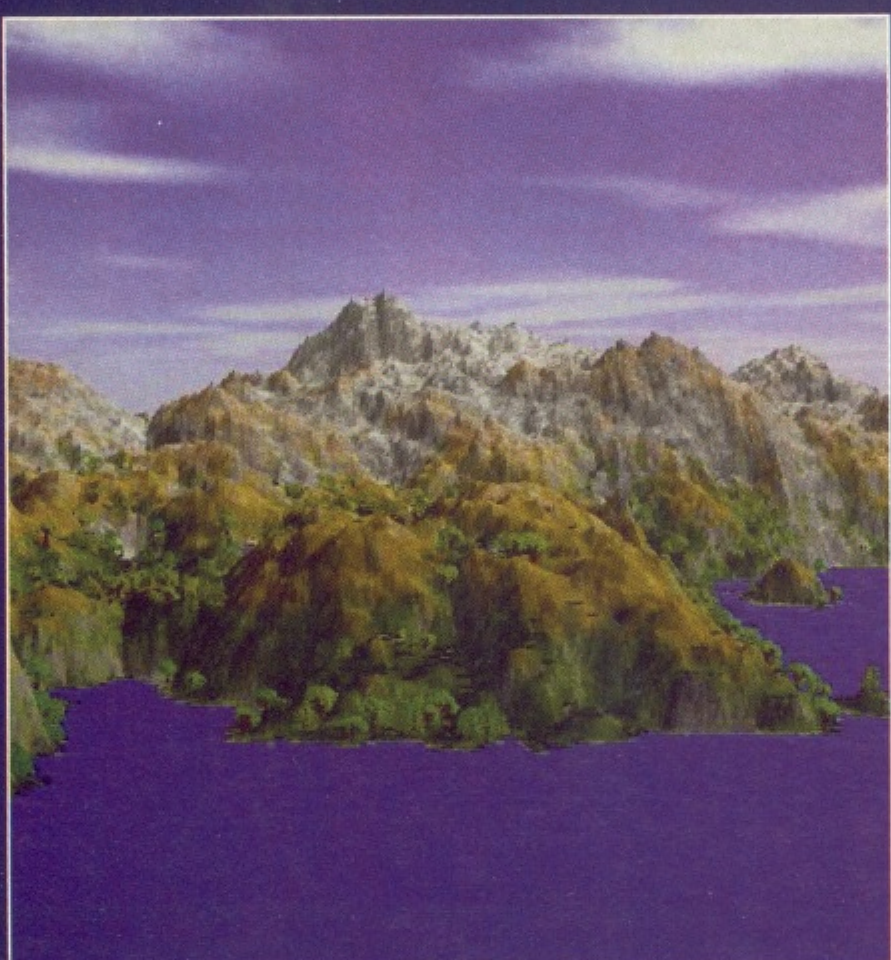
Vista Pro 3



Fly across sweeping tundra and create your own fantasy lands with Vista Pro 3, the best professional landscape generator around.

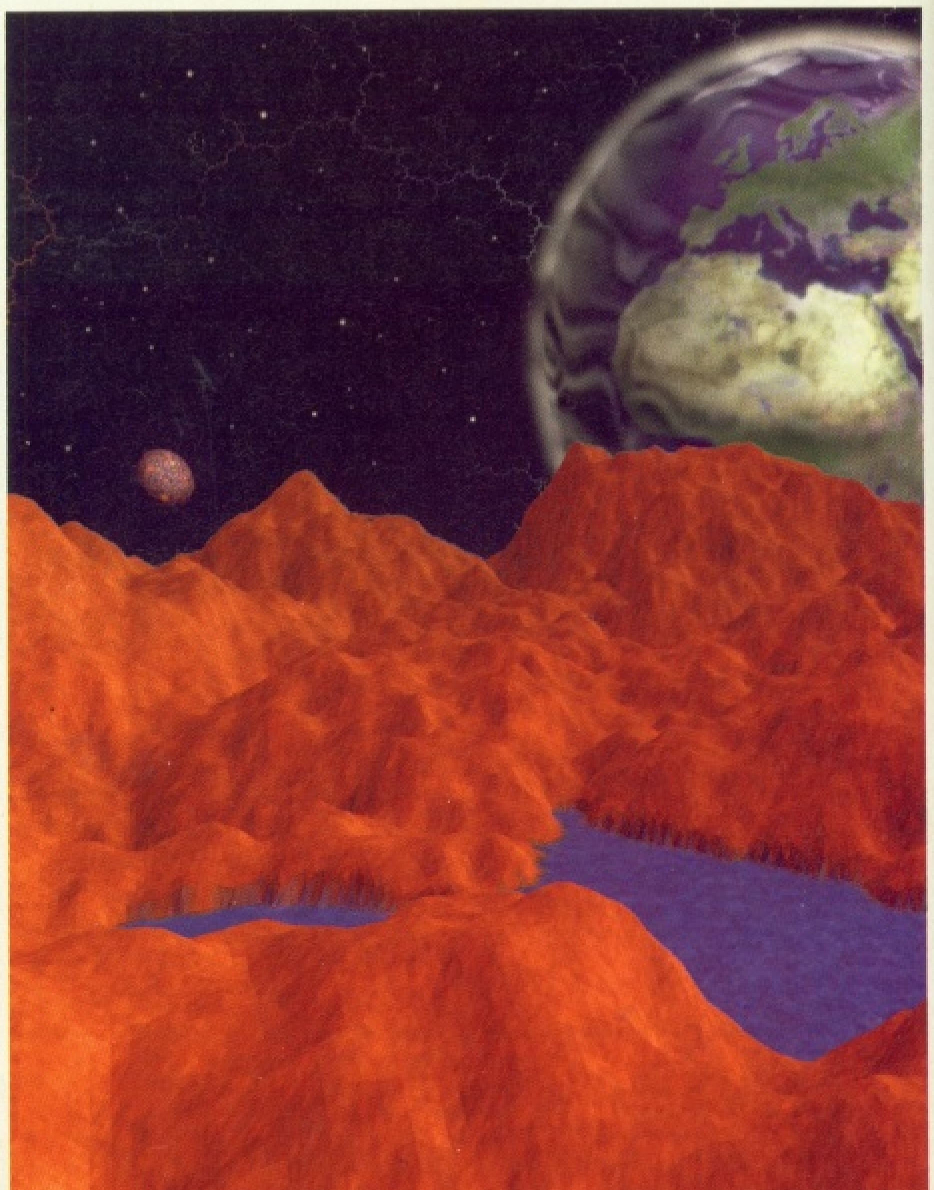
Loading Instructions

Loading Vista Pro could hardly be easier. Floppy disk users should boot from their hard drive and insert disk 164. Open the disk and double click on the Install_Vista icon. This will ask you for a path on your hard drive where you want Vista Pro installed, along with MakePath and GeoMorph. Make sure you have a few megabytes of space free in your chosen destination.
Vista Pro can then be started by simply clicking on its icon. MakePath and GeoMorph will be installed with the main program and are just as simple to start.



A year go we gave you Vista Lite, a popular package that people seemed to get a lot of amusement value out of. A common theme in the feedback we had from that, however, was that people kept finding they wanted to do a bit more, to produce landscapes of higher quality. Hey, no problem, this is CU Amiga Magazine you're reading. This month we are giving you, for the price of a pint of air, not only the full and complete VistaPro 3.0, but Makepath, Geomorph and a nice bundle of DEM files, too.

If you have used Vista lite, then the general theory should be pretty familiar to you. Vista uses a system of data developed by the United States Geological survey team for 3 dimensional mapping called Digital Elevation Model or DEM. These files break a planetary surface area into pixels of a predetermined site. By storing the height of the land at each point, an accurate rendition of the landscape can be made. We have given you a collection of DEM files to get started with, but if you crave more our CDs will keep your collection updated over the months



▲ **Any landscape can be rendered with your chosen backdrop placed in the background automatically. The backdrop here was created mainly with Imagine 4.0.**

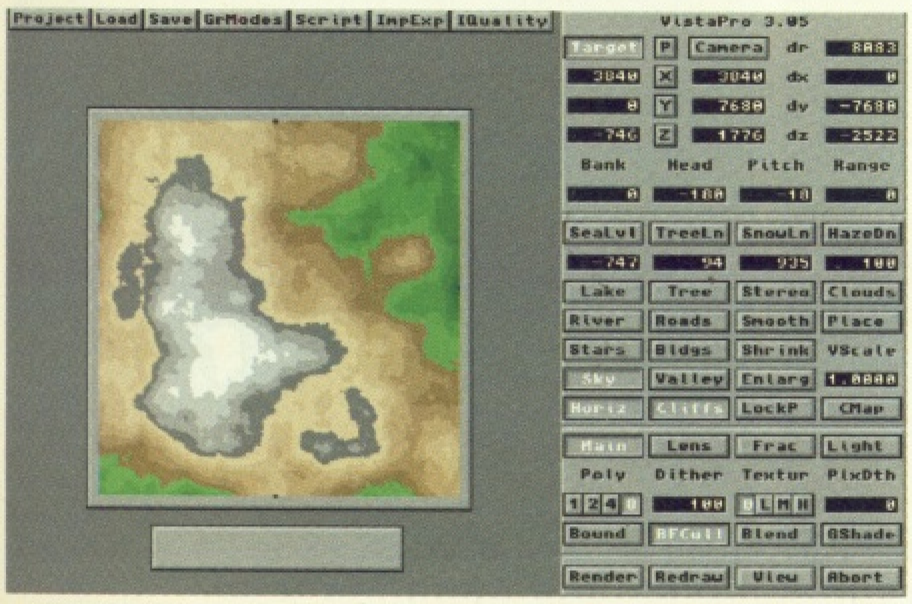


▲ Now you can render scenes up to 4096x4096 pixels in full 24-bit. This is a mere 640x512 and has visible jaggies when blown up to this degree but looks nice all the same.

or you can buy vast collections from CD-ROM companies or download them from the internet. Almost the entire surface of the world has been mapped in DEM format, as have quite large chunks of the Moon, Mars and even Venus.

Selecting the load DEM option from the menu will allow you to select one of the ones we have provided. If you want something a bit different, then hit the Random gadget from the Frac sub menu on the control panel, and a new landscape will be generated for you. Once you have a landscape you are ready to go with, just follow this simple step-by-step guide and you will have your first picture.

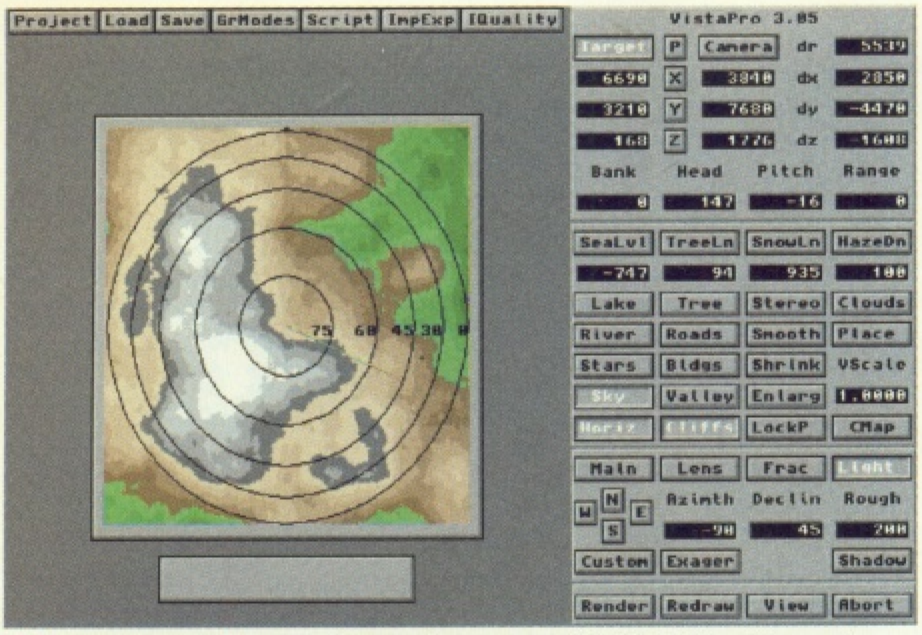
1. Select the sea level by hitting the Sealvl gadget and clicking on the point on your landscape you want the sea to rise up to. You will be offered the option of waves. These add a little to render times, but much improve still images. You can set the snow line similarly with the Snowln button, remembering that this time you are clicking for the lowest height rather than the highest height. The Treeln setting can make a large difference to the over-



▲ All Vista Pro landscapes start life as a two dimensional Digital Elevation Map (DEM).

CMap

Cmap is in fact one of the most important options in VistaPro... And not a lot of people know that. Changing the colour palette can utterly transform your images, but take particular note of the colours assigned for contrast, exposure and skyhaze. Changing these can have a subtle but very important effect on the final outcome, especially when you pick off the wall values. Change the settings around, and when you return to the main menu hit the REDRAW gadget. This will allow you to see the results of the changes you have made without resorting to re-rendering.



▲ Vista Pro has some great power features that are not available in the Lite edition, such as the shadow and lighting options for added realism.

all balance of the image too, so make sure you've got it right. At this point you can add rivers and lakes with the appropriately titled buttons. Once you have selected them, you click on the map where you want them to appear and the computer will draw them in for you. You always have the option of not accepting what the computer comes up with. Take care with these, particularly with the lake function, which will fill up the land with a lake until the land surrounding it is high enough to produce natural banks. If you click this on the top of a mountain, you may flood the entire map!

2. Place your camera by clicking on the camera gadget at the top of the control panel and then clicking on the map where you want the viewer to "stand". Click on the target gadget and do the same for the target. As default the camera and target will be at ground level. If you want to change this, just click on the z value and change it by hand. You can lock positions in the X, Y and Z axis by clicking on the little buttons between the camera and target co-ordinates. Select the p gadget to see a wire frame preview. From this preview you can re-aim the camera by clicking in the screen. When you are satisfied, click all the lock gadgets to avoid accidentally moving your view.

MakePath and GeoMorph



One of the most tricky aspects of Vista is defining flight paths for animations. You can set start and stop points and get it to draw frames in between, but this is pretty limiting. These two programs will allow you a lot more control over your animation scripts.

Makepath will figure out paths for you. Load in the DEM file you want to use and you can draw your flight path onto the map with repeated mouse button clicks. From the menu you can select various flight models such as cruise missile, which flies low over the surface, jet aircraft or even buggy which drives along at ground level. Set the number of frames you want, set any pitch changes and rolls, click on the makepath gadget and off it goes. Makepath will even show you a quick preview of your fly-by in wire frame if you hit the preview button. Once you are done, save the script out and load it into Vista to render the entire fly-by.

Makepath is great for automatically changing the camera angles through the animation. Geomorph is a rather more complex beast which can change the landscape itself through the animation. Using this, it is possible to make trees grow and rivers flood as you fly over them. You can even morph the landscape to produce some really twisted animations. The scope of these two packages is beyond the scope of this little introduction, so we recommend you load them up and have a go on them yourself. Once you are familiar with the workings and terminology of VistaPro you should find them surprisingly straightforward!

3. Select the LIGHT sub menu gadget on the control panel and hit CUSTOM. Click and hold the left mouse button in the landscape window and you can move the sun position around. Find yourself something which satisfies you – somewhere where strong shadows will be cast without shadowing out your whole image is usually best.

4. Get the sky the way you want it. The clouds, stars, sky and horizon buttons allow you a lot of control over the appearance of the sky, though advanced users will want to experiment with the effects of haze density, and the colour map (more about this later). For now, select Sky, Horizon, and Clouds. The



▲ It's not all rolling hills and lush greenery you know. Alien lunar landscapes and deserts can be created just as easily, and can look even more dramatic.



▲ Create your own Bay of Islands by flooding a landscape to raise the sea level. Mountains become islands and valleys turn into the deep blue sea.

clouds requester offers you a few options. Make density 35 and hardness 20 for a nice wispy cloud effect. Cloud height can have a surprising difference too, so play with these values.

5. Get a test render. Go to the Main sub menu on the control panel and select BFCULL and click on the number 4 gadget under the Poly option. This will produce a very quick render, but without much detail. Hit the render button and off you go. It shouldn't take very long to produce this image, even without an accelerator. This will give you a reasonable idea of what the final image will look like, but be aware that you can never be sure until the final image is done.

If not everything is to your satisfaction, then go back to the earlier steps and try again until it comes good. Once you are satisfied, go on to step 6, the final render.

6. Time to produce that finished image! Click Poly to 1. This will give you the largest number of polygons in the final Image and is pretty much essential. The other settings to pay attention to here are the texture and shading options. The two types of shading available are Blend and GShade. The latter is a sophisticated fast smoothing algorithm which softens hard edges between polygons, and renders almost always look better using this. Blend is a simple smoothing algorithm which rarely looks brilliant on its own but is often useful in conjunction with the GShade. The texture buttons read OLMH for Off, Low, Medium or High. This is a way of setting the amount of fractal texturing applied to the surfaces. We're going to go for M for this one. M is the best setting for general usage, as texturing adds a lot to landscapes. H tends to make things look a little too random and rough, but if there are a lot of close up foreground polygons using this plus setting, a little bit of pixel dithering can help out a lot. When you are all set, hit the render button. If you have an '060, go and pour yourself a cup of coffee. If you have a 68000 go to sleep, take in a movie and visit your aunt. When you return your screen has an amazing landscape.

Right, that's it. There's a whole load more you can do with Vista, luckily we have provided you with an on-line manual. CD owners will find the manual in several DTP formats as well so that it can be properly printed out. ■

Andrew Korn

Control Panel

1. These are the co-ordinates for the target that define the viewing direction of the 'camera'. Click on the Target button then on the map or enter values by hand. Be careful not to click outside the map accidentally.

2. This works just like the target section, but defines the point from which the scene is viewed. Try altering the Z value to high positive or negative figures for interesting results (try getting under the mountains).

3. These values are the distances between the two above sets of co-ordinates. You can ignore these normally.

4. You can alter the rotation of the camera from here, so as to look up, down, or bank to one side.

5. These settings alter the levels of the sea, trees, snow and the density of fog or haze. The sea level figure is a maximum altitude, as is the tree figure, while the snow figure sets the minimum altitude.

6. This is where you can add features to your landscape. They don't all work in the same way, but most are fairly self-explanatory. The lake option requires you to simply click on the map to add a lake at that point – likewise with the river option. Both of these are intelligent. For example, if you select a river, then click at the top of a mountain, the river will find a natural course down to lower ground. The tree button brings up a new screen from which you can set the amount and type of flora in the scene. The smooth option is useful for making rugged random fractal maps look more realistic. Shrink and enlarge can be used to convert DEM maps to smaller or larger projects (with more or less polygons). Features can be placed at specific points using the Place button.

7. The four buttons shown here switch the bottom section of the control panel to one of four modes. The default mode is Main.

8. This is how the bottom of the panel looks in Main mode. The Poly buttons control how many polygons are used to render the image. Lower values give finer results but take longer. The Dither value sets the amount of dithering, while the Texture buttons switch between off, low, medium and high. The Bound and BFCull buttons can be used to speed up rendering by discarding invisible parts of the image.

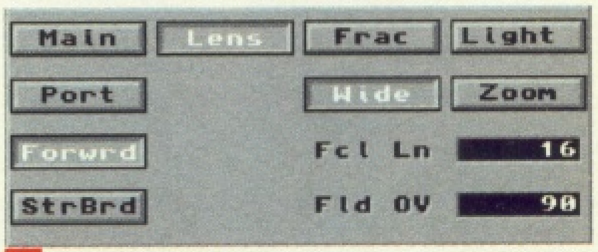
9. These buttons are always visible along the bottom of the control panel. Render is used to actually render the image, Redraw will redraw (not re-render) the image, which is handy if you've made changes to the palette for example. View shows you the rendered image while Abort stops the rendering process.

10. The lens of the virtual camera can be set to anything from an extreme 180 degree fish eye to a tight zoom. The field of vision is indicated on the map. By default this is set to a wide angle.

11. The Fractal section is where you can create your own DEM maps. It's very simple. Just click on the Random button and a DEM will be created from the random number. If you don't like it, just hit the button again. Remember to use the Smooth option in conjuntion with the random fractal generator, unless you want a very rugged looking landscape Island it's a short cut for creating an island. You can ignore the FrDim and Frctlz buttons in general, but you can mess around with them to get more individual results.

12. For highly realistic images you should get the hang of using the lighting options. These allow you to specify the direction of the light source, and also to control the shadows. The Exager setting can be invoked to give a more pronounced shadow effect.

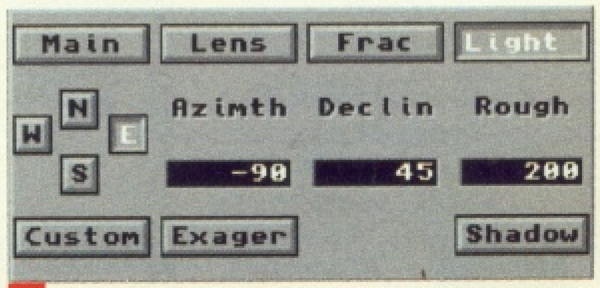




10 The control panel splits into different sections at the bottom. This is for setting the camera lens.



11 While there are plenty of DEMs on the cover disks and CD, you can generate your own from here.



12 Lighting options are included for you to add your own specific shadows and dramatic effects.

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AS SEEN ON TV

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This software is **supplied on an Amiga floppy disk,** so it will even give you access to your PC CD-ROM drive. Call 0 1793 514188 for any further information.

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ENCYCLOPEDIA OF THE PARANORMAL — AGA, 4-6mb

Order: CD423 UK: £19.99 - AUST: $40

The Epic Interactive Encyclopedia of the Paranormal is an exciting new multimedia Amiga based CD-ROM featuring high-res AGA graphics throughout. Covering subjects like: **UFOs & Aliens, Strangelife (Bigfoot, Lochness monster etc), Mysticism, Mind over matter, Myths and Legends** and more, this CD promises to give you an "experience". Also for the first time on an Amiga multimedia CD, there are true "AVI" files (Audio & Video). Hundreds of colour images, masses of AVI's, and animations, hundreds of voice-overs, over 40 minutes of presentations around 400 subject synopsis', and hundreds of 'cross-referenced' articles.

AS SEEN ON TV

THE EPIC ENCYCLOPEDIA 1997 — AGA Amiga, 4mb, Harddisk

Order: CD262 UK: £29.99 - AUST: $60

We took everyones valid comments with concern to the first release of the Encyclopedia and changed, modified, updated the whole product to the extent that it now includes around **16,000 subjects.** The new 1997 version of the **Epic Interactive Encyclopedia** is available now. It features a superb new updated multimedia interface, hundreds of film clips, images, sound samples and subject information text. The 1997 version now supports a multitude of new features inluding: Colour images, Full-screen filmclips, National anthems and a unique **Inter-ACT™** feature which allows you to interact with certain subjects like: Draughts, etc. A superb reference title for the whole family.

Ratings in the Magazines.
CU Amiga - 91%
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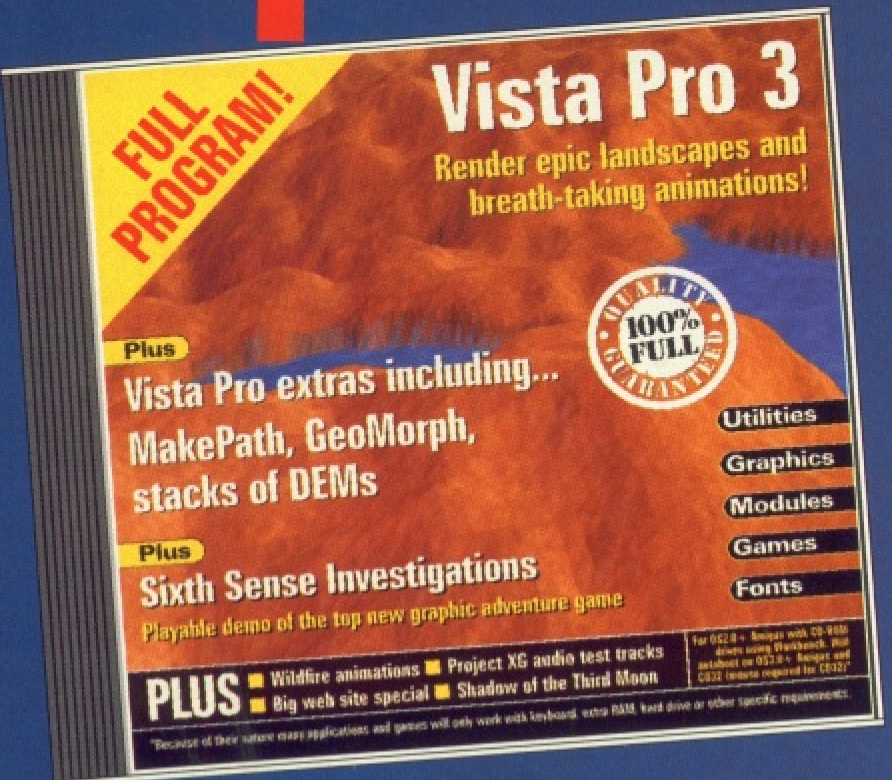
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Super CD-ROM 14



The fascinating Vista Pro heads up another superb CUCD, with audio tracks and over 570Mb of data.

Welcome to CUCD14. If you haven't invested in a CD drive yet, read this to see exactly what it is that you're missing.

CUCD14 can be booted from a CD32 or an A1200/4000 with CD32 emulation. In order to use this CD from your own Workbench, you only need to click on the InitCD icon, which will then allow software to run from the CD. It initiates MUI, IDer and the NewIcons systems – don't be surprised if the look of your Workbench suddenly decides to change. The whole thing is only temporary, and it can be removed by simply clicking on InitCD again.

To help you in finding your way around, there is a DOCS.GUIDE, which will connect you to nearly all text documents, and INDEX which is a CD search tool. Just like everything else on the CD, you need to click on them to activate them.

Audio tracks

This month the CD audio tracks are dedicated to Project XG, our DIY sound card feature. We've used the tracks to demonstrate the sound quality of Project XG. The track title is Mr Bones and it's composed by Michael Walthius.

You can play the tracks using a standard hi-fi CD player or, if your CD file system has audio replay support, directly from your Amiga's Workbench. Most CD file systems will display a 'CDDA' icon when inserting CUCD14. Clicking on this should make your CD-ROM play the first track via its audio output jacks. On a hi-fi CD player, the first audio track is track 2. Turn the volume down in case the CD player decides not to mute the data track on track 1.

The first track (2) is GMPlay playing Mr Bones using the Amiga's internal sound features, while the second track (3) is the same MIDI XG file played via Project XG connected up to an Amiga.

You can find more of Michael Walthius' compositions on his Web site at http://www.keybdwizrd.com

Highlights

Vista Pro 3.05



Here you can find the latest version of the premier fractal landscape generation, Vista Pro. Unlike the previously covermounted 'lite' version, this Vista Pro 3.05 has full 24-bit capability and comprehensive animation scripting. And if that's not enough, GeoMorph and MakePath are also included to aid the creating of incredible landscapes and animations. To install it, all you need to do is just simply drag the directory over to your hard drive. It will require 6Mb of space on the hard drive.

6th Sense Investigations



Islona's new amazing arcade adventure contains interactive actors, puzzles and much, much more. This large CD exclusive demo features a full level from the game and it will run directly from the CD.

IDer explanation

CU Amiga CUCDs now make use of a utility called 'IDer'. IDer is placed in every so-called icon 'tool type' for project icons on the CD. Project icons are normally found on items such as pictures, text files and so on. If you expect a program to be launched to view/read/play the file you clicked on, it is a project icon and it will be now using IDer.

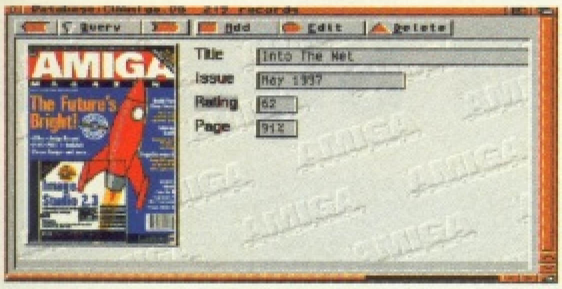
IDer recognises different file types and launches programs to view the file accordingly. Unlike previous CDs, IDer allows you to configure exactly what viewers and players you like to view your files. When you first ran InitCD, you would have seen a requester asking if you'd like to change the settings for the CD. Don't worry if you happened to ignore it at the time, as the CD preferences can be found in the top left of the Prefs drawer,

If you'd like to change the picture viewers to your own then simply move to the Image tag and press the pop up gadget next to the box for IFF, GIF, JPEG and IFF pictures. Now select your chosen viewer and press Save. From now on, this CD and any future CD will use your choice of picture viewer.

As a final note, IDer is just the latest reason why you simply must click on InitCD when using the CD. We hope you prefer the new system.

What's in your drawers?





Root: We've changed the layout a little this month. The WWW directory moves into the CUCD drawer and instead there will be a themed special each month. Naturally all the standard Workbench 3.1 files are present as well as the usual host of CD support software in the System/CDsupport drawer.

Vista Pro: The ultimate Vista Pro set up complete with Makepath and GeoMorph. Ready to run from the CD or be dragged to your hard drive, each program will automatically run the FPU or non FPU version depending on your system.

Sixth Sense: Ready to run off the CD, Islona's excellent Sixth Sense Investigations graphic adventure demo can be found in here.

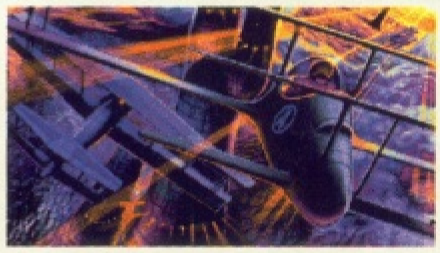
System: Your standard Workbench system files but the main action here is the subdirectory 'CDsupport'; containing all of the viewers and players needed in order to access into the rest of the CD.

Prefs: Be sure to run the CUCD Prefs program found in the top left of this window, see the accompanying IDer box.

Project XG: This month's bumper theme goes with the Project XG DIY sound card feature. Here you can find a wealth of support software including the Dominator and Camouflage MIDI sequencers, MIDIPlay and an absolutely incredible library of General MIDI and XG MIDI files. There's even audio comparisons between Project XG and Paula.

CUCD: This is where the vast majority of the CD hides. Enter at your peril...

Magazine: Magazine tie-ins – you can find ProPage extras, a long asked for catalog of past CU Amiga issues, C Tutorial and Sound Lab support material and the unregistered STFax (see the review this issue).



Online: Here can be found the Web leecher, WGet, a collection of RFC (Internet standards files), Usenet news archives and searchable indexes of Aminet CDs.

Programming: Packed to the brim, there's lots of programming aids to be found including ADE, AMOS and Blitz2 support files. ClassAct, SAS-C update and a whole lot more.

Graphics: Your usual massive collection of graphics utilities. This month there's a special installation of the Wildfire animation package. You can also find some PhotoCD support utilities.

Readers: Some pickings from our submissions FTP site including pictures, modules and utilities sent in by some of our most valued, and most talented readers.

CD-ROM: Cunning file of CD related material such as the latest AmiCDFS, the latest MakeCD CD Writing software and an even bigger collection ofCDIDs!

Demos: All that pounds, thumps, flashes and twirls. We have some rather large and rather neat demos including Dreamscape for you.

Utilities: Too much to mention but we'll try; Virtual Floppy, Virus Workshop, ToolType Editor, Rainboot, ScreenKeys, Startup Control, DiskSpeed, datatypes and lots,lots more...

Sound: The latest GMPlay can be found here along with an even larger and better sounding tone set if you have the memory. There's also the latest legendary MPEGA 3.0 MPEG layer III player.

Games: Fun stuff here including the awesome 'The Shadow of the Third Moon' demo and a bumper collection of Workbench games.

Previews: Comprehensive Demo of ArtEffect 2.0, see the review in this issue. Amy Resource and also a sneak screenshot of the upcoming NewIcons 4.

WWW: Woah, we've moved the web directory in here this month. It's got the latest snapshot of CU Online, so do check it out!

Disk doesn't load?

If your CD does not load contact DiskXpress on 01451 810788. If they advise that the CD is faulty send it along with a SAE to: CU Amiga Magazine Disk Returns, DiskXpress, 7 Willow Court, Bourton Industrial Park, Bourton on the water, Gloucestershire GL54 2HQ.

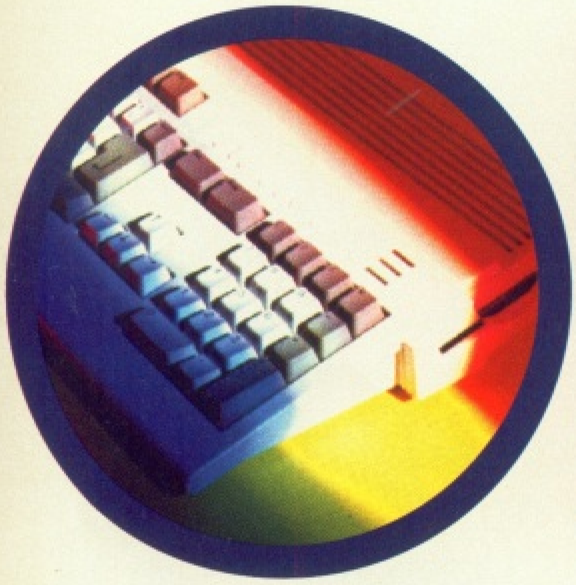
Please note that some CDs will not autoboot on systems other than CD32s, so try loading it from Workbench first.

CUCDs will work with almost all Amiga configurations and filesystems.

However, we recommend older CD filesystems be replaced where possible. A non-working program is *not* an indication of a faulty CD!







News

CD-ROMs Hit the High streets

Civilization CD leads the way



Guildhall Leisure in co-operation with Epic Marketing will be bringing Amiga CD-ROMs to the high streets for the first time since the heyday of the CD32. Guildhall Leisure, the largest distributor of Amiga games in the country, have distributorship deals with HMV, Game and Electronics Boutique.

Persuading the high street stores to take CD software for the Amiga has traditionally been impossible, as the shops' ordering departments are under the impression that Amigas can't read CD-ROMS and CD32 ownership is too small to bother with. Guildhall have finally persuaded them to try it and see.

The list of titles to be released is very impressive. Over the next few months Guildhall will release CD-ROM versions of Microprose F1, Theme Park, Dune 2, Super skidmarks Plus, Civilization and others at £14.99, with Blitz Basic and DPaint 5 at £19.99. Also on the way are two previously unreleased titles: Street Racer (a conversion of the PlayStation hit) and Gloom 3, apparently a huge series of level updates consisting of 200Mb of data put together by frequent CUCD contributor Gareth Murfin.

Guildhall Leisure have told us that Game are planning on reducing the shelf space they give to Amiga titles. Guildhall will stick primarily to Electronics Boutique in the hope that concentrating Amiga software purchases in a single chain store will reduce the chances of that store dropping shelf space too.

The first release in this schedule is Civilisation CD. This contains the full ECS and AGA versions. Playable straight from CD, this eliminates the problems many have had with the extraordinarily buggy Microprose hard drive installer. This is an enormously absorbing strategy game which should be in anyone's collection. CU Amiga advocates everyone throwing a spanner in the works and making the shop purchasing departments panic. If everyone who buys the CD edition of CU goes to their local branch of Electronic Boutique and buys Civilisation CD (or if not one of the other titles) in the last week of August, it will force the shops to think again about their Amiga strategy. Guildhall Leisure can be contacted on 01302 890000.



Micronik Prices Announced

Full details of the new range of Amiga clones from Micronik, including pricing, have been released. The Infinitiv tower systems, based on the Micronik Infinitiv tower and bearing the official 'Powered by Amiga' logo, are due for release to the public by the beginning of August.

Currently the range consists of three systems. They all have a standard A1200 motherboard and A1200 spec, and all A1200 expansions such as accelerators or hard drives can be connected. Complete systems may be sold in the near future.

Model	Spec	£ Price	DM Price
1300	As A1200, tower case, 150w PSU	£349.95	DM799
1400	As 1300 plus 5 Zorro II slots, 2 ISA slots. Video slot optional.	£469.95	DM1149
1500	As 1300 plus 5 Zorro II/III slots, 1 ISA slot, video slot optional, SCSI-2 interface, A4000 compatible CPU slot.	£599.95	DM1499

Current bank rate at time of publication £1=3.06DM.
Prices listed in Deutschmarks are Micronik's RRP, prices in Sterling are from Micronik's UK distributors, Blittersoft.
Call Blittersoft on 01908 261 466 or Micronik on (+49) 2171-72 45 0

Lotus Pacific Announces Chinese Rights Acquisition Gateway Disputes Lotus Claim

Lotus Pacific Inc have announced the acquisition of the Amiga rights, patents and trademarks for Hong Kong, Macao, Taiwan, China and bordering countries between China and the former Soviet union. However, Gateway 2000 have been quick to challenge the validity of this deal, claiming that the rights passed on by Rightiming Electronics Corporation were not theirs in the first place.

The deal – which is worth $5m and 8,000,000 shares of common stock - represents a rationalisation and shift in direction by Rightiming, who are a major shareholder in Regent Electronics Corp.

Gateway 2000 moved quickly to refute Lotus Pacific's claim, stating unequivocally that they were sole owners of the rights to Amiga worldwide. When we spoke to REC, they told us that their claim to the rights is based on an agreement and a multi million dollar sale which predates Gateway 2000's purchase. REC took over from Newstar / Tianjin Family Electronics, who were sold a rights package by Escom in 1995. The dispute comes about because of a clause in the original contract specifying that the rights were not transferable. The legal status of the transition from NewStar to REC is unclear. According to Petro Tyschtschenko of Amiga international, the press release from Lotus Pacific announcing the acquisition was quite a shock as Pacific Lotus and AI were in licensing negotiations at the time.

Rightiming have apparently developed an Amiga based multimedia set top box device called the Wonder TV A-6000. It combines the functions of a multimedia personal computer, a fax machine, an internet box, an Audio and video CD player, a games machine and a Karaoke player. A full set of patents for the Wonder TV A-6000 are being registered in China and we have been told that negotiations are currently underway between representatives of REC and Sichuan Changhong, China's largest television manufacturer, who appear ready to enter into an agreement to manufacture. According to David Fei of Lotus Pacific inc, they are conservatively estimating 200,000 units by the end of 1998.



However it seems clear that Lotus Pacific have their eye on the opportunities of this vast market. The potential sales for this type of all in one web TV could be huge in a market with a growing desire for consumer goods and a slowly growing disposable income.

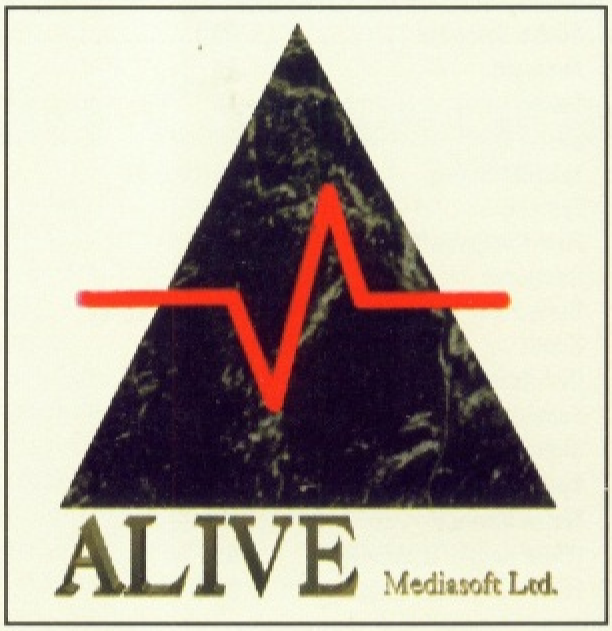
New SoundStudio Announced

A new version of OctaMED SoundStudio is currently in development, contrary to an earlier decision by its creators RBF Software to drop the Amiga version. This latest update could be the most radical yet, as the programming honours have been handed over to Joern Plewka. OctaMED's original programmer, Teijo Kinnunen, has been busy working on the PC version of SoundStudio for some time now, but continual requests for a new Amiga version have finally paid off.

Joern Plewka is part of the team behind the Melody DSP sound card and will be keen to improve SoundStudio's Melody-specific features to take maximum advantage of their promising hardware. At the moment, a full features list is not available. Joern will be radically redesigning the program from the bottom up, whilst retaining the original OctaMED style. RBF Software hope to have the new version ready for release by the end of the year.

Alive Mediasoft ltd

Steven Flowers and Andrew Reed have announced the formation of a new software house called Alive Mediasoft. Steven Flowers had been working for some time on a series of games that were originally going to be published by Direct Software, but these will now be published by his own company, Alive. The first title from Alive is likely to be Haunted, an epic 18 certificate five CD interactive movie. Following on from that, Alive hope to bring a range of Macintosh games to the Amiga under a form of 'transparent' emulation. They are currently working on bringing out Doom 2 and Phantasmagoria, but exactly which games do appear will depend on the results of Alive's ongoing investigations into the obscure legalities of this rather unprecedented move. See the New Faces of Amiga Gaming feature on page 30 of this issue of CU Amiga for more details of Alive Mediasoft and other new publishers. Alive Mediasoft can be contacted on 01992 718990.



News in Brief

Amiga Party

Amiga International held a small get together in their Langen offices late last month. Attendees included Phase 5, Haage and Partner, Micronik, Eagle Computing and German magazines Amiga Spezial and Amiga Plus. Although mainly a domestic affair, Microvitec and Power Computing took the opportunity to drop in, as did Amiga Line, a Russian Amiga magazine. The get together was an informal affair aimed at keeping the Amiga community on good relations and working together. This may become and annual event. Amiga International president Petro Tyschtschenko described the get together as "small but nice".

Faces Wanted for Game

Sadeness software are inviting anyone who would like to appear in a computer game to send in images of themselves. Sadeness' forthcoming release Foundation is a Settlers like game with a lot of detail about every individual character – including a picture of them. If you want your likeness to appear as one, send Sadeness a scanned image in any uncompressed format such as GIF, PNG or IFF in at least 80x80 pixels and at least 16 colours. File size must be less than 80k. Images should be sent on disk to Foundation Mugshot, Sadeness Software, 13 Russell Terrace, Mundesley, Norfolk NR11 8LJ or E-mailed to paul@sneech.demon.co.uk with the words "Foundation Mug-Shot" in the subject line. For those without access to a scanner, a man with a scanner has kindly offered to take passport sized photos and scan them in for you. Send your photo and a postcard to him at Foundation Mugshots, c/o Dennis Smith, 220 Bishopthorpe Rd, York, Y02 1LF before the end of September.



Brimble's Back

Bang! Tick... Tick... is the new CD album from Allister Brimble, the musician responsible for soundtracks of a host of Amiga games including Alien Breed, Project X, Dungeon Master 2 and Colonization. The CD takes the creation of the universe and the Earth as its theme, with epic Jarre-influenced synthesiser tracks occasionally punctuated by snatches of narrative. Production quality is excellent, with no shortage of lush textures and wazzy noises to keep your ears entertained. The CD costs £11.95 and is available from Allister Brimble, Hill House, Lapford, Crediton, Devon EX17 6QE. Cheques should be made payable to "Allister Brimble" - credit card orders cannot be accepted. You can E-mail Allister Brimble at... Allister_Brimble@compuserve.com.



◀ Who said concept albums are dead? Bang! Tick.. Tick...

Amiga Dealerships Spreading

Innovations Lights and Magic of Malaysia and Rotterdam based Computer City have announced distribution deals with Amiga International. Computer City will be distributing throughout the Benelux region, and have stated their belief that the market for Amiga products there has a lot of potential for growth. ILM Malaysia has plans to set up a local distributors network to market the line aggressively, and has announced the availability of a range of hardware bundles. The low end model will be an Amiga Magic Pack with an '030 accelerator and a hard drive. They will also sell the A4000, and mention the Magic A1200, an Amiga clone to be released this November. ILM Malaysia want to produce a database of local Amiga owners to help set up a community of users.

Contact ILM on (+6) 03 7544 544 and Computer City on (+31) 10-4517748.



Street Racer Hits Amiga

Ubisoft's Street Racer is to get an Amiga release via Guildhall Leisure. The comedy race 'em up has been around on various other platforms for a while now, but for reasons unknown, the Amiga version was shelved despite it being completed some time ago. While Mario Kart comparisons are inevitable, whether it can match those heights of gameplay remains to be seen. We'll be bringing you a full review very soon. For more information, contact Guildhall Leisure on 01302 890000.







News in Brief

Pios 1 Launch Date

PIOS have announced a September launch date of the PIOS 1. PIOS have been rather quiet about this hybrid Amiga/Macintosh clone system since the Gateway 2000 takeover, but we should be seeing base systems ship very soon now. The Pios 1's entry into the Amiga clone market will be dependant on the status of ProDAD's pOS operating system, due for first public release in the near future.

Amiga E lives!

Despite the suggestion in last month's programming tutorial that development in E had ended, it seems it has not. The new version (3.3a) of the compiler and the source level debugger are due to be released in September. Another component of the E distribution is EasyGUI, a GUI creation system which has also been recently updated.

Check the normal Aminet sources for distribution.

Alien F1

Paolo Cattani, author of the forthcoming racing game Alien F1, now renamed Grand Prix Simulator, has told us than in fact he has not signed for Epic Marketing or any other software publisher. He is still keeping his options open, and is still looking for a source of information on F1 track data, etc.

F1 Bought Out

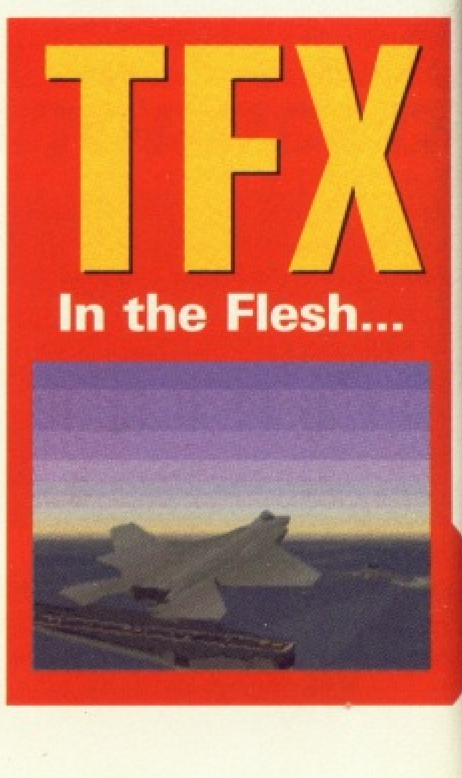
An agreement has been made for 5th Dimension to take over F1. The take-over will be in effect from 1st August 1997. The exclusive ranges of the two licenseware houses will be continue to be published under their own labels, with the new F1 Licenseware operating from the same address as 5th Dimension.

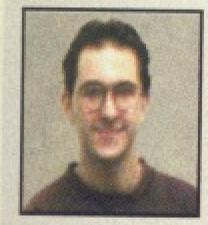
5th Dimension Licenseware have said that they are determined to build on the past success and are on the look out for new contributions to the scheme.

Both companies can be contacted at 1, Lower Mill Close, Goldthorpe, Rotherham, S Yorks,. S63. Tel 01709 888127.

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Special Reserve	55	01279 600770
Weird Science	IFC	0116 246 3800
White Knight Technology	53	01920 822321
Wizard Developments	38 & 74	0181 303 1800





Stateside News

by Jason Compton: **Jason Compton is Editor in Chief of Amiga Report Magazine**

One Open House Leads To Another

With a lack of pure Amiga events this summer, Amiga companies who care have been forced to improvise. National Amiga of London, Ontario, Canada, held an open house in late June, inviting local developers as well as users from across the land to come for a day of Amiga fun and learning. The event, held with only a small amount of local and Internet promotion, still attracted over 150 eager Amiga users.

Also Wonder Computers of Ottawa, Ontario announced plans to hold a mini-expo at their headquarters. Between the store itself and a large tent planned for the parking lot, well over 5,000 square feet of show floor will be available. Initial response from contacted Amiga companies, including ClickBOOM, is reportedly strong.

Before their 1996 bankruptcy reorganization, Wonder held the WOA Toronto 1995 show in December of that year, marking the first major North American Amiga event of the post-Commodore era. Since emerging from bankruptcy in April 1996, Wonder has not held a major Amiga event. The show is planned for the weekend of September 6-7.

National Amiga can be reached at 519-858-8760, or www.nationalamiga.com.online... Wonder can be reached at 613-721-1993, or www.wonder.ca online

Mr Hardware, Mr Update

Joe Rothman and Mr. Hardware Computers have made some changes to their product line.

Retail Escort, the all-in-one program for managing and tracking a retail-oriented business on the Amiga, is now in version 4.1. Retail Escort offers accounts receivable and payable, cash, checking and credit account tracking, various reports, invoice and inventory control, and other vital parts of managing a retail operation. Out of the box, Retail Escort supports American, Canadian, and British currency and tax notation.

Mr Hardware has also gutted the price for their Video Escort business management software targetted at independent videographers. For a short time, Video Escort will sell for US$100 direct from Mr Hardware. In addition to the main Video Escort software, the price does also include a full version of SBase4Pro-RT.

Mr Hardware is the owner and developer of SBase4, having taken over the software from Oxxi. Retail Escort still retails for US$500 and for more information contact: Mr. Hardware, 59 Storey Ave., Central Islip, NY 11722 USA.516-234-8110 voice/fax.hardware@li.net e-mail.www.li.net/~hardwareWWW

DKB Set To Unleash Inferno

DKB, long time manufacturer of Amiga expansion hardware, is nearing release of their Inferno graphics card for Amiga 2000s equipped with their WildFire.060 card. The WildFire has been on sale for some time now and is said to have the fastest memory bus of any Amiga expansion card, in addition to a built-in super fast SCSI controller and Ethernet card.

The design of the WildFire provided a PCI interface for future expansion. Enter the Inferno, a card built specifically for the bus of the WildFire. Official information on the WildFire is currently difficult to come by, but the card will run CyberGraphX, have 4 megs of video RAM, offer a monitor switch, and have the internal bandwidth to do 24 bit screens at very high resolutions. The current projected price is approximately US$350.

DKB made a halted effort to break into the graphic card market some years ago with a board called the Talon. Difficulties with the design team prevented the card from being released.

ImageFX/Aladdin Crossgrade Offer

It's over a year since Nova Design added Aladdin 4D to their product line, and the first new version is just about to ship. If you're an anxious owner of Aladdin or ImageFX, it's your lucky day.

Nova Design offer a short-time "crossgrade" for owners of both packages. If you're an installed user of a prior release of Aladdin, upgrade to the new A4D 5.0 is US$100. At the time of your upgrade, Nova will throw in ImageFX 2.6 for an extra US$125, half its usual street price.

Aladdin 4D 5.0 adds a completely new and modernised interface, CyberGraphX and Video Toaster support, expanded lighting and lens flare systems, and a full ARexx port plus easy integration with ImageFX.

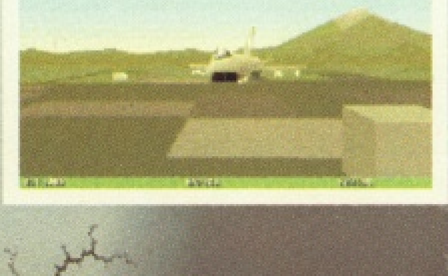
If you're an installed and registered user of ImageFX 2.0 or up and would like to get involved with Aladdin, Nova is offering the same upgrade price. $100 buys you Aladdin 4D 5.0... Nova Design can be reached at 804-282-1157 voice, Online-www.novadesign.com

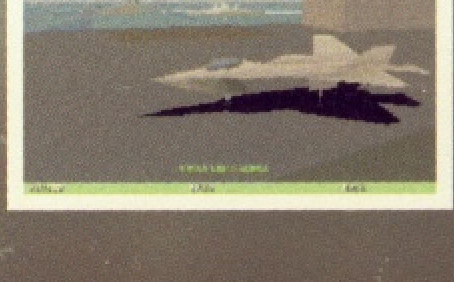
Aurora Works of Canada, a new Amiga games developer, has begun promoting an upcoming title, H-Bomb. Billed as the "first real-time Amiga TCP/IP.multi-player action game", H-Bomb's technical requirements are a shopping list for a killer Amiga system. The game plays direct from CD (no floppy versions), supports AGA but prefers a 16-bit CyberGraphX screen, and supports AHI retargettable audio as standard. Further, any two Amigas with TCP connections can link to play each other, even over the Net. H-Bomb pits four tanks against each other on a variety of different landscapes. Limited press demos are being conducted now, and a public demo will be out quite soon.

Coming Next











FREE!
ON COVER CD-ROM
(and on disk if we can swing it)

Month

TFX

The Apex of Military Flight Simulation

The complete game brought to you exclusively by

CU AMIGA MAGAZINE

NEW...

POWER UP

AMIGA™ GOES POWERPC™

POWER UP YOUR AMIGA...

*A further dimension is being added to Amigas with our new PowerPC based **BLIZZARD POWER BOARDS** for A1200, A1200 based Tower Systems and A1500/2000 systems along with the new **CYBERSTORM PPC** for A3000/4000 systems. You'll now be able to benefit from performance many times beyond the speed of the fastest 680x0 based boards.*

Designed as upgrades for existing systems, **Power Boards** incorporate innovative dual processor technology where a fast PowerPC RISC processor is combined with a 68k CPU, dynamically sharing memory and system busses.

While the original AmigaOS 3.x continues to run on the 68K CPU, supporting existing applications to provide backward compatibility, the PowerPC CPU is backed by comprehensive PPC Libraries which provide the functionality to integrate PowerPC into an Amiga multitasking environment.

Software developers can easily optimise their programs, step by step, porting single tasks to PowerPC code, which then run in parallel with 68k tasks. Leading Amiga software vendors are preparing ported or optimised versions of their software packages already. It is anticipated that a large quantity of software products supporting the PowerPC will be available soon.

Power Boards will be delivered with a comprehensive suite of utilities, including the PPC library, as well as tools for creative users. Among them is a Public Domain GNU C compiler for PowerPC (including sourcecode), many demo programs and utilities with sourcecode. In addition to this software, free developer support is available via FTP site.

Last but not least, a PowerPC optimised version of CyberGraphX V3 with RISC optimised CyberGL/3D plus MPEG functions and libraries is included (along with a special GGX driver to support the AGA chipset) with full and comprehensive documentation.

	Blizzard 603e PowerBoard	Blizzard 603e+ PowerBoard	Blizzard 2604 PowerBoard	Cyberstorm PPC
PowerPC CPU	603e	603e	604e	604e
Clock Speed	175MHz	200MHz	150-200MHz	150-200MHz
Companion	68030	68040/68060	68040/68060	68040/68060
CPU	50MHz	25-50MHz	25-50MHz	25-50MHz
Est. PPC Performance	@ 175MHz	@ 200MHz	@ 200MHz	@ 200MHz
MIPS	Approx. 250*	Approx. 280*	Approx. 350*	Approx. 350*
SpecFP95	Approx. 3.1	Approx. 3.5	Approx. 7.1	Approx. 7.1
Memory Option	Max. 64Mb	Max. 64Mb	Max. 128Mb	Max. 128Mb
SIMM Sockets	1	1	4	4
SCSI On Board	Fast SCSI-II	Fast SCSI-II	Ultra Wide	Ultra Wide
Amiga Compatibility	A1200(+T)	A1200(+T)	A1500/2000	A3000/4000(+T)
Est. Availability	Summer '97	Summer '97	Summer '97	Summer '97

Blizzard 603e Power Board - A1200(+T)

The new Blizzard 603e Power Board is an inexpensive Power Up Accelerator for A1200 system owners who already have a board with a socketed full 50MHz 68030+MMU processor (these CPUs have a gold finish to the top surface) eg.50MHz Blizzard 1230-II, III, IV or similar. Featuring a 175MHz PowerPC 603e RISC CPU, the board has a socket for the 50MHz 68030, expansion capabilities of up to 64Mb high speed memory and built in SCSI-II controller.

Imagine the performance from your A1200 with this low cost board!

Blizzard 603e+ Power Board - A1200(+T)

The Blizzard 603e+ Power Board is the highest spec Power Up Accelerator for A1200 systems. Featuring a 200MHz PowerPC 603e RISC CPU, the board has a socket for a companion 68040 or 68060 CPU, expansion capabilities up to 64Mb of high speed memory and built in SCSI-II controller. This board is ideally suited to those owners who already use an accelerator with either a 68040 or 68060 CPU (ie. Blizzard 1240T/ERC or Blizzard 1260 owners or their equivalents)

If you want the BEST from YOUR Amiga A1200 - this is it!

Blizzard 2604 Power Board - A1500/2000

If you own either an A1500 or A2000 you can now take advantage of PowerPC technology with this 604e CPU RISC based board which has a socket for a companion 68040 or 68060 CPU, expansion capabilities up to 128Mb of high speed 64-Bit memory, built in Ultra-Wide SCSI controller and a high performance expansion slot for expansions such as the CyberVision PPC. This board is ideal for owners of accelerators with 68040 or 68060 processors such as the Blizzard 2040 or Blizzard 2060 owners (or their equivalents).

Want the BEST from YOUR Amiga A1500/2000? - Look no further!

CyberStorm PPC Board - A3000/4000(+T)

CyberStorm PPC is the ultimate accelerator for Amiga 3000[T], 4000[T] and systems with compatible CPU slots, offer blistering 604e performance - more than 10 times faster than any 68k based accelerator on sale today! Available with clock speeds of 150, 180 and 200MHz, the companion socket for the 68k processor accepts either a 68040 or 68060 CPU. The board provides 64-bit wide extremely fast memory expansion using pairs of standard SIMMs, dynamically shared by the two CPUs. Additionally, CyberStorm PPC comes with a DMA driven Wide ULTRA SCSI controller on board offering transfer rates of up to 40Mb/sec for even the most demanding of professional applications. A 32Bit high speed expansion connector, with DMA access to the main memory, is also provided for later upgradeability.

The 200MHz version of the CyberStorm PPC provides performance of more than 350 MIPS or approximately 8.1 SPECint95 and 7.1 SPECfp95*... breathtaking speed that goes far beyond that offered by most PC systems. In the second half of the year, an advanced graphics board will become available for the CyberStorm PPC expansion slot, providing a subset of the innovative CAIPIRINHA custom chip. By having a stand alone version of the DLRP (Display List Risc Processor), this board will offer superior display capabilities through higher VRAM-based resolutions, pixel depths and speeds, as well as the potential to begin developing software supporting the functionality of the forthcoming A\BOX system.

PRICING AND AVAILABILITY:

Options with or without 68k CPUs will allow users to fit the CPU from their existing accelerator. Delivery of Power Boards is scheduled for Summer 1997 following finalisation of CE approvals. Call now for full details.

Special prices available to existing BLIZZARD & CYBERSTORM board users

Blizzard 603e/603e+ Board...	175MHz	200MHz
with Empty 030 Socket	£289.95	
with Empty 040/060 Socket		£379.95
with 68030/50MHz fitted	£329.95	
with 68040/25MHz fitted		£429.95
with 68040/40MHz fitted		£459.95
with 68060/50MHz fitted		£614.95

POWER PC TECHNOLOGY, POWER PC SPEED and POWER PC PERFORMANCE

Cyberstorm PPC 604e Board...	150MHz	180MHz	200MHz
with No Processor	£479.95	£549.95	£629.95
with 68040/25MHz fitted	£519.95	£579.95	£669.95
with 68040/40MHz fitted	£549.95	£609.95	£699.95
with 68060/50MHz fitted	£709.95	£769.95	£859.95

**Quoted performance figures are estimations based on specifications from Motorola/IBM and are relevant to the PowerPC processor only. Prices include VAT @ 17.5%. Owners of other makes of board or those who don't already have an appropriate CPU - please call for prices.*

Harwoods... always the Fastest Amiga Boards and NOW PowerPC Technology for Amigas too!



CHECK OUT... NEW LOWER PRICES ACROSS THE RANGE OF BLIZZARD AND CYBER PRODUCTS!

STILL THE FASTEST, NOW LOWER PRICED, NO ONE ELSE COMES CLOSE!

CYBERVISION 64/3D



64-Bit ENGINE A2000/3000/4000 (T Series) 3D VERSION 24-Bit COLOUR ACCELERATED GRAPHICS CARD.

For all Zorro-3 and Tower System A1200s with Zorro II backplanes.

LOWER PRICES!

The core of this great board is the VIRGE GRAPHICS CHIP from S3. With 3D capabilities, it's able to process complex 3D functions in hardware (eg. shaded & textured surfaces) with Trilinear Filtering and Shading/Fogging for super realistic Real Time 3D Rendering. When used with CyberGraphX 3D library, Cybervision 64/3D can even offer a broad range of 3D facilities for any software developer.

CyberVISION 64/3D... 4Mb Version — £169.95

MPEG Decoder - added to the Feature Connector to provide real time MPEG audio and video decoding at full size custom screens or, in Workbench windows (HQ display using 16/24Bit modes from CyberGraphX Workbench). Stereo audio output is provided via the supplied dedicated line output jack. Upgrade to a Cybervision 64/3D and MPEG bundle (from previous Cybervision 64) for a special low price! — £149.95

Monitor Switcher - with integrated scan line doubler. Designed to fit into the Amiga slot, this gives full automatic switchover from the standard Amiga signal to Cybervision 64/3D's output. Both cards may be fitted inside A3000/4000 models leaving three Zorro-III slots free. — £79.95

CYBERSTORM II

CAN BE EXPANDED TO A FULL 68060



AMIGA 68040ERC AND 68060 ACCELERATORS

You can choose between the 68040/40ERC Cyberstorm II or the ultra powerful 68060 version. When you fit a Cyberstorm II 68060 Accelerator to YOUR A3000, A3000T, A4000 or A4000T you can for example, render a graphic with Imagine 2.0 software in just 2.4 minutes! Compare that with 10.34 minutes on a standard A4000 '040/25! With no jumpers, both Cyberstorm II models are fully plug and play and, A4000 users even have the option of a SCSI-2 Module if they wish (A3000s already have SCSI built in).

- Up to 128Mb of standard SIMMs can be installed and you can even transfer the 72Pin SIMMs from your Amiga A4000 straight onto your new Cyberstorm.
- Optional SCSI-2 Module
- If your budget currently only covers the cost of Cyberstorm II 68040ERC, you can always upgrade later to the full 68060 processor for the extra power!

LOWER PRICES!

Cyberstorm II 68040/40 40MHz 68040ERC - 0Mb, Expandable to 128Mb — £299.95
Cyberstorm II 68060/50 50MHz 68060 - 0Mb, Expandable to 128Mb — £449.95
Cyberstorm II SCSI-2 Module — £79.95
Cyberstorm II SIMM RAM Expansions (Please call for a range of SIMM prices) — £Call

1240T/ERC TURBO ACCELERATOR MEMORY BOARD



A1200T* TURBO ACCELERATOR and MMU/FPU for *TOWER SYSTEMS
40MHz 68040 - 0Mb Standard, expandable to 128/256Mb
30MIPS with 60 Nanosecond SIMM fitted.

CAN BE EXPANDED TO A FULL 68060

A super LOW COST A1200 Turbo Accelerator Board, ideal for housing on any *Tower System A1200 main board (mechanical dimensions, high power consumption and heat emission require an active cooling cap, we therefore do NOT recommend fitting to standard A1200s without the appropriate modifications etc.). The "ERC" Processors used on these boards are recycled and vigorously tested 68040 CPUs operating at 40MHz with MMU/FPU - an excellent guaranteed and competitively priced alternative. Available options such as the SCSI-IV Kit and RAM are shared with the Blizzard 1230-IV and 1260.

LOWER PRICE!

Blizzard 1240T/ERC Turbo 40MHz 68040 and MMU/FPU, 0Mb 32Bit Fast RAM, exp. to 128/256Mb — £199.95

2040ERC TURBO ACCELERATOR MEMORY BOARD



A1500/2000 TURBO ACCELERATOR and MMU/FPU
40MHz 68040 - 0Mb Standard, expandable to 128Mb
30MIPS with 60 Nanosecond SIMM fitted.

The Blizzard 2040ERC is a super LOW COST board which offers A1500/2000 owners the opportunity to upgrade to the same performance as the Blizzard 1240T/ERC Board. Users will then be able to enjoy full A4000/040 power as well as take advantage of the built in SCSI-2 interface. The "ERC" Processors used on these boards are recycled and vigorously tested 68040 CPUs operating at 40MHz with MMU/FPU - excellent guaranteed competitively priced alternative.

CAN BE EXPANDED TO A FULL 68060

Blizzard 2040ERC Turbo
40MHz 68040 and MMU/FPU, 0Mb 32Bit Fast RAM, exp. to 128Mb — £299.95

LOWER PRICE!

1260 TURBO ACCELERATOR MEMORY BOARD

EASY TRAPDOOR INSTALLATION... No modification necessary. Reliable low heat output.



A1200 TURBO ACCELERATOR and MMU/FPU
50MHz 68060 - 0Mb Standard, expandable to 64/192Mb
38.71MIPS with single sided 60/70 Nanosecond SIMM fitted.

Offers Amiga A1200 owners FULL 68060 POWER with a board that simply plugs into the trapdoor slot. Your A1200 will then operate at TWICE or even THREE TIMES THE SPEED of an '040 based upgrade and up to FIVE TIMES THE SPEED of a standard A4000! Available options such as the SCSI-IV Kit and RAM are shared with the Blizzard 1230-IV and 1260.

Blizzard 1260 Turbo 50MHz 68060 and MMU/FPU, 0Mb 32Bit Fast RAM, exp. to 64/192Mb — £349.95

LOWER PRICE!

2060 TURBO ACCELERATOR MEMORY BOARD



A1500/2000 TURBO ACCELERATOR and MMU/FPU
50MHz 68060 - 0Mb Standard, expandable to 128Mb
38.71MIPS with 60/70 Nanosecond SIMM fitted.

Offers Amiga A1500/2000 owners the same specification as the remarkable Blizzard 1260 Turbo (A1500/2000s will operate at up to FIVE TIMES THE SPEED of a standard A4000) with FULL 68060 POWER and also includes built in SCSI-2 interface!

Blizzard 2060 Turbo
50MHz 68060 and MMU/FPU with SCSI-2, 0Mb 32Bit Fast RAM, exp to 128Mb — £499.95

LOWER PRICE!

1230-IV TURBO ACCELERATOR MEMORY BOARD

EASY TRAPDOOR INSTALLATION... No modification necessary. Reliable low heat output.



A1200 TURBO ACCELERATOR and MMU
50MHz 68030 - 0Mb Standard, expandable to 128/256Mb
9.91MIPS with 60 Nanosecond SIMM fitted.

The highest performing 68030 Accelerator available for your A1200. With its 50MHz 68030 and MMU, the 1230-IV offers BETTER PERFORMANCE at a LOWER PRICE. With a SysInfo rating of 9.91 (using a 60 n/s SIMM) you can see the 1230-IV is very fast... a performance gain of up to 500% is achieved! Via its Fast Expansion Bus, an optional SCSI-2 Controller module can easily be fitted. An industry standard SIMM socket provides for up to 128Mb of auto-configuring 32Bit Fast RAM (up to 256Mb with the SCSI-2 option using its extra SIMM socket).

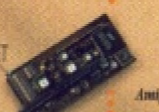
LOWER PRICES!

Blizzard 1230-IV Turbo 50MHz 68030 and MMU, 0Mb 32Bit Fast RAM, exp. to 128/256Mb — £99.95
Fast 60 Nanosecond SIMM RAM Expansions - 32Bit, 72Pin — £Call
Motorola Maths Co-Processor - 68882 PGA type FPU, 50MHz — £49.95

MOTOROLA MOTIVATED

Blizzard and Cyberstorm products use MOTOROLA 68000 and PowerPC series processors. They run **WITHIN** the electrical timing specification laid down by Motorola to prevent any possible overheating/reliability problems. So, when you pay for a 50MHz CPU for example, that's exactly what you get... not a 40, 33 or even a 25MHz CPU "clocked" to 50MHz! Look out for the **MOTOROLA MOTIVATED** logo - your guarantee of our commitment to quality and reliability - **BEWARE** of "clocked" CPUs! T/ERC and ERC processors used on selected boards are recycled and vigorously tested 68040 CPUs operating at 40MHz - an excellent guaranteed and competitively priced alternative.

BLIZZARD SCSI-IV KIT



SCSI-2 MODULE for 1230-IV, 1240T/ERC & 1260, & ADDITIONAL 128Mb SIMM SOCKET
(Fast SCSI-2 DMA Controller - upto 10Mb/s transfer rates with additional SIMM socket/extra RAM)

Blizzard SCSI-IV Kit — £79.95

What the Magazines think...

Blizzard products have consistently achieved the highest magazine accolades and awards!

Amiga Shopper *"...1260 is destined to become the ultimate object of desire for A1200 owners"* - **91% STAR BUY Award**
Amiga Computing *"...If you want the fastest Amiga in the World, get this board"* - **92% BLUE CHIP Rating**
Amiga Format *"...Ride on the fastest A1200 in the World..."* - **95% GOLD Rating**

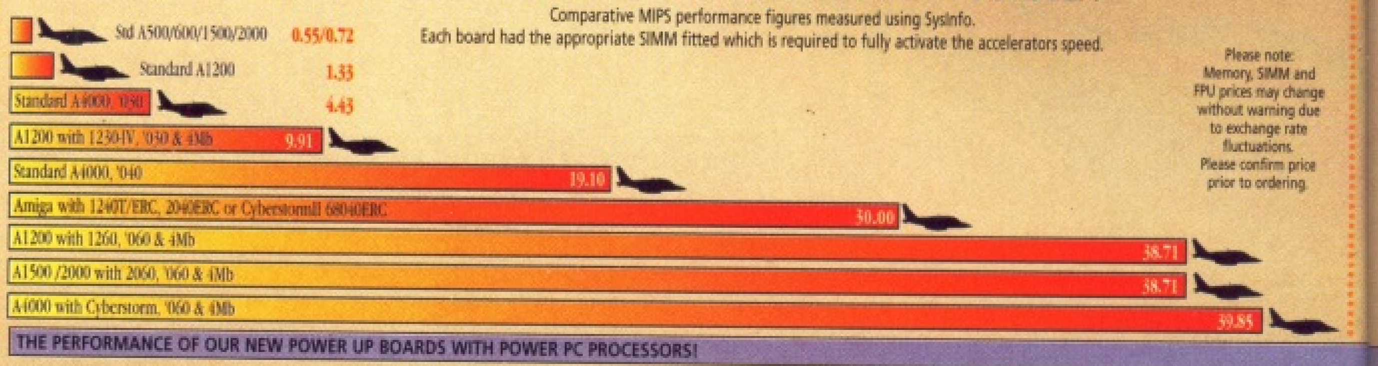
OUR RANGE HAS WON MORE AWARDS THAN ANY OTHER

1230-IV, 1240T/ERC and 1260 FEATURES

- May be disabled with simple keystroke on boot up - for full games compatibility, even badly programmed/older software
- Battery backed self re-charge Real Time Clock
- High performance expansion with full 32Bit wide DMA
- Easy trapdoor installation - no modifications required (1240T/ERC fits in Tower)
- 1230-IV features PGA FPU socket allowing optional 50MHz 68882 FPU

JUST COMPARE THE PERFORMANCE FIGURES FOR YOURSELF!

Comparative MIPS performance figures measured using SysInfo.
Each board had the appropriate SIMM fitted which is required to fully activate the accelerators speed.



Please note: Memory, SIMM and FPU prices may change without warning due to exchange rate fluctuations. Please confirm price prior to ordering.

COMPATIBLE WITH ANY STANDARD VIDEO SIGNAL AND S-VHS!

ProGRAB™ S-VHS 24RT Plus

NEW LOWER PRICES!



The revolutionary S-VHS **ProGrab™ 24RT Plus** with Teletext is not only the best way to get crisp colour video images into your Amiga, from either live broadcasts or taped recordings, it also costs less than any of its rivals. This real time PAL/SECAM/NTSC* 24-Bit colour frame grabber/digitiser has slashed the price of image grabbing on the Amiga and, at the same time, has received rave reviews for its ease of use and excellent quality results. ProGrab™ has earned honours from just about every Amiga magazine and Video magazines too! And... with ProGrab™ you needn't be an expert in Amiga Video Technology, a simple 3 stage operation ensures the right results... **Real Time, after time.**

STAGE 1

Select any video source with S-VHS or composite output. This could be your camcorder, TV with SCART output, satellite receiver, domestic VCR/player or standard TV signal passing through your VCR/player... the choice is yours.

STAGE 2

With ProGrab's software, select an image you wish to capture using the on screen preview window and Grab (because the hardware grabs frames in real time, there's no need for a freeze frame facility on the source device). Once grabbed, simply download and view the full image on your Amiga screen. ProGrab also includes a Teletext viewing and capturing facility from either TV or satellite sources.

STAGE 3

Use the 'grabbed' image with your favourite word processor, DTP or graphics package. ProGrab really does make it that simple!



ProGrab™ 24RT Plus...

- Supports all recent Amigas and is also fully AGA Chipset compatible. You can render images in any Workbench screen mode resolution including HAM8 mode (Amiga RAM permitting).
- Saves and Loads images in IFF/ILBM, IFF/ILBM24, JPEG, BMP, PCX, and TARGA file formats. ProGrab saves animations as Anim5 files and animations with sound (requires PCMCIA interface and separate sound sampler) as Anim5 + 8SVX files. A range of image processing effects, palette computing routines (AGA only) and dithering methods are featured in ProGrab Version 2.6.x. Photogenics fully supports ProGrab with a custom 'Loader' to enable grabs directly from within the program - this direct input method will save YOU more time when handling large images.
- Software has built in mono and colour animation facilities. Number of frames is dependant on Amiga RAM.
- Release 2.6.x software now includes...
  Additional Teletext Facilities - with either terrestrial or satellite TV signals.
  Larger Preview Window - double resolution and four times area of previous ProGrab software.
  International Support - now compatible with composite PAL, SECAM and NTSC - straight from the box.
  Larger Preview Window - double resolution and four times area of previous ProGrab software.



ProGrab™ 24RT Plus costs just £99.95 LOWER PRICE!
and is supplied with just about everything you'll need♦...

- ProGrab™ 24RT Plus Digitiser
- Latest ProGrab Version 2.6.x Software
- Mains Power Supply Unit
- Parallel Port Connecting Cable
- User Manual
- Input sockets for Composite and S-VHS.

♦ A video source cable will be required to match your own equipment - ask us for details.
**Standard ProGrab hardware is PAL/SECAM/NTSC compatible. Interlace mode options are available with PAL & SECAM only.*
ProGrab supports any Amiga with Kickstart 2.04 or later and a minimum of 1.5Mb free RAM.

PCMCIA Interface - A600/1200

ProGrab's optional PCMCIA Interface includes the latest version software and extends performance for serious or professional users - offering the following benefits...

- Faster downloading times (up to FIVE times quicker)
- Improved animation speeds of up to 11fps (mono) and 3.5fps (colour)
- Saving of animations direct to your Amiga's hard drive
- Freeing of your Amiga's parallel port for use by a printer or other peripheral
- Sound sampling and animation capabilities (separate sound sampler required, see right)

PCMCIA Interface LOWER PRICE! **£29.95**

Stereo Sound Samplers

Two high quality 8-Bit Sound Samplers, specifically designed for use with our ProGrab 24RT digitisers, are available (PCMCIA Interface required).



The Hi-Fi version features the same 30MHz A/D convertor used in the ProGrab, maximum frequency is therefore only limited by the Amiga's hardware.

It also has a higher band width (40Hz to 20KHz) than our standard sampler.

Standard Stereo Sampler	**£19.95**
Hi-Fi Stereo Sampler	**£24.95**

ProTel™ Terrestrial/Satellite Teletext Decoders

Amiga or PC add ons for grabbing terrestrial or satellite TV Teletext pages which don't need a dedicated Teletext TV/Video to operate... required signal is simply the output taken from a standard VCR or a TV that provides a suitable video out signal. Once information has been downloaded, ProTel allows you to view pages instantly... no more waiting whilst your TV searches!

ProTel™ for Amiga



Stand alone unit designed to match your Amiga allowing files to be exported as ASCII Text for use in your word processor or saved as IFF graphics for DTP presentations.

ProTel™ Amiga Teletext Decoder £44.95

ProTel™ for PC



NEW

ProTel PC Teletext Decoder - internal ISA PC card:

- Friendly software
- Capture speeds of 1000 pages in 2 mins
- Background tasking • Easy configuration
- Save page files (ASCII, BMP, ProTel formats)
- Native 32Bit Windows '95 application
- Requires 386DX PC and 8Mb RAM (12Mb Rec.), Windows '95/3.1 or Workgroup 3.11, VGA display, Mouse and 1 free 8/16Bit ISA slot - MINIMUM
- PAL and SECAM

ProTel™ PC Teletext Decoder £29.95

Camcorder User commented... "If you're looking for a high resolution 24 bit digitiser then, at this price, ProGrab 24RT represents **great value for money.***"*

ProGrab™ - Voted as **The Best Video Hardware** *product for the Amiga. Especially pleasing because the award comes from Amiga Shopper magazine's readers... Satisfied Customers!*

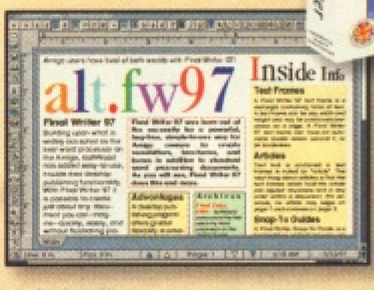
ProGrab™ - Amiga Format 93% **Gold Rating** *and comments like... "ProGrab 24RT Plus is quite simply the digitiser to get", "Incredible value for money - no other digitiser offers so much for so little" and "Offers far more features than any other digitiser near the same price"*

ProGrab™ - Amiga Shopper 95% **STAR Buy** *and remarks like... "Sharp, crisp and faithful to the original colours, we were mightily impressed" and... "Highly Recommended. Whether you are a Videographer or a Graphic Artist, look to the ProGrab 24RT Plus. It's a winner" Hi-Fi Stereo Sampler - Amiga Shopper 92%* **STAR Buy April 1997.**

CU Amiga said ProGrab™ is... "Just the job for beginners and semi-professionals on a tight budget" and, "very hard to beat. For the money, **nothing can touch it***"*

NEW... Final Writer 97





The Best of Both Worlds

Amiga users have the best of both worlds with SoftWood's new Final Writer 97. Building upon what is widely accepted as the best word processor for the Amiga, SoftWood has added easy to use, trouble free desktop publishing functionality to Final Writer. With new Final Writer 97 it is possible to create just about any document you can imagine - quickly, easily and without frustrating program errors.

Final Writer 97 was born out of the necessity for a powerful, bug-free, simple to use way for Amiga owners to create newsletters, brochures and forms in addition to documents normally created in a WP. As you will see, Final Writer 97 does this and more. Over the years Final Writer has matured from the first Amiga word processor to offer outline fonts (originally known as Final Copy) to now the first word processor on any computer to offer both word processing and a rich set of desktop publishing capabilities.

New Features

Can you use the new features in Final Writer 97? Consider how you use a typical word processor. First, you begin entering text at the top of page one. As you enter more text it must be added to text you've already entered. With the exception of small text blocks in some word processors, you can't normally enter text anywhere on your page.

Now consider what you can do with a desktop publishing program. In a desktop publishing program you can enter text anywhere on a page and continue that text on any other page. You've seen this technique used in newspapers and magazines where a feature or article starts on page 1 and is continued on page 5. You've also seen columns of different widths on the same page as well as headlines that span more than one column and multiple lines. All of these layouts can be created using the new Text Frames feature.

Final Writer 97 combines the most comprehensive Word Processing features, with Desktop Publishing functionality, in one easy to use package, for Amiga owners who want the best of both worlds. From simple correspondence to complex newsletters, Final Writer 97 handles all tasks with ease, meaning for the first time on Amiga, Mac or PC, there's a product worthy of the name 'Document Publisher'.

With these new features you can:

- Enter text anywhere on a page
- Continue text on any other page
- Resize the space or frame that text is in
- Flow text around other text
- Set "Snap-To" guides to align text and graphics
- Position text and graphics one pixel at a time

SoftWood has not changed the way you are used to working in Final Writer, they have simply provided new tools. These new tools along with the features Final Writer already incorporates will allow you to create newsletters, forms, brochures and other documents never before possible with a normal word processor.

Final Writer 97 truly offers the ultimate in document creation. Whether you are typing a simple letter or producing a complex newsletter, Final Writer 97 gives you the power to do your job quickly and easily.

Why should you upgrade?

You've kept your Amiga because it's still the most powerful, easy-to-use computer on the market. Now, enhance your software library by upgrading to the most powerful, easy-to-use word processor on **any** computer.

System Requirements: Amiga with a Hard Drive, Workbench 2.04 or above and a minimum of 2.5Mb RAM (more recommended).

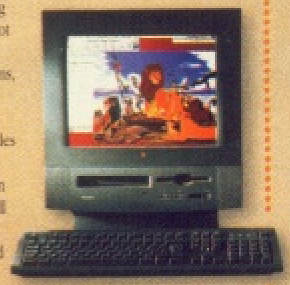
SoftWood Final Writer 97	£49.95
Upgrades are available for registered users, please call for prices.	
Other SoftWood Products...	
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THE APPLE ALTERNATIVE

IF YOU'VE REALLY GOT TO BUY A NEW SYSTEM TODAY... the next best thing to your Amiga could be an Apple Macintosh.

BUT WHY MACINTOSH?

Just like your Amiga, all Macs are Motorola based but have had the advantage of PowerPC RISC CPUs for some time - remember, even Pentium PCs in Windows™ systems are still merely CISC processors! Like the Amiga, Macs were designed from the outset to be an easy to use system with their windowing environment fully integrated - not bolted on later. And... Macs not only outperform other PC systems, but have recently become very competitively priced too.



Software: there are over 1800 titles specifically written for PowerPC Macs alone, plus thousands from pre PowerPC days which are still compatible. Industry standards such as Word, Pagestream, Word Perfect, FileMaker Pro, Excel, Quark XPress, Photoshop and many others have been developed for Macs.

Creativity: Apple still lead the creative world - 80% market share in colour publishing, most web sites are authored with Macs and post production video editing is dominated by the Macintosh too.

The magazine you are reading now was published using Macs!

Internet and Communications: all Macs are Internet Ready - many include built in modems and fax facilities etc. and standards like Netscape and Internet Explorer ensure the Net is easily accessible.

Connectivity and Expandability: all Macs incorporate built in networking and external SCSI connections - adding printers, drives, scanners etc. really is plug and play!

Education and Edutainment: Macs offer you the advantage of all the latest software from the likes of Dorling Kindersley, Microsoft etc. to help with the whole family's learning skills.

Multimedia: Apple is the World's No.1 Multimedia PC Vendor!

Recreation and Games: Some of the top selling games are available on the Macintosh including Ultimate Doom, MYST, Rebel Assault II, Dark Forces, Descent, Full Throttle and many more!

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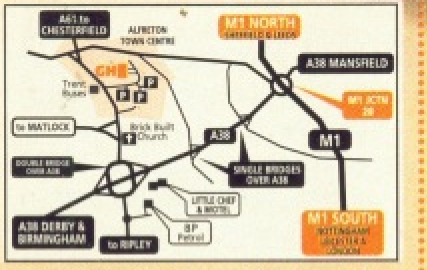
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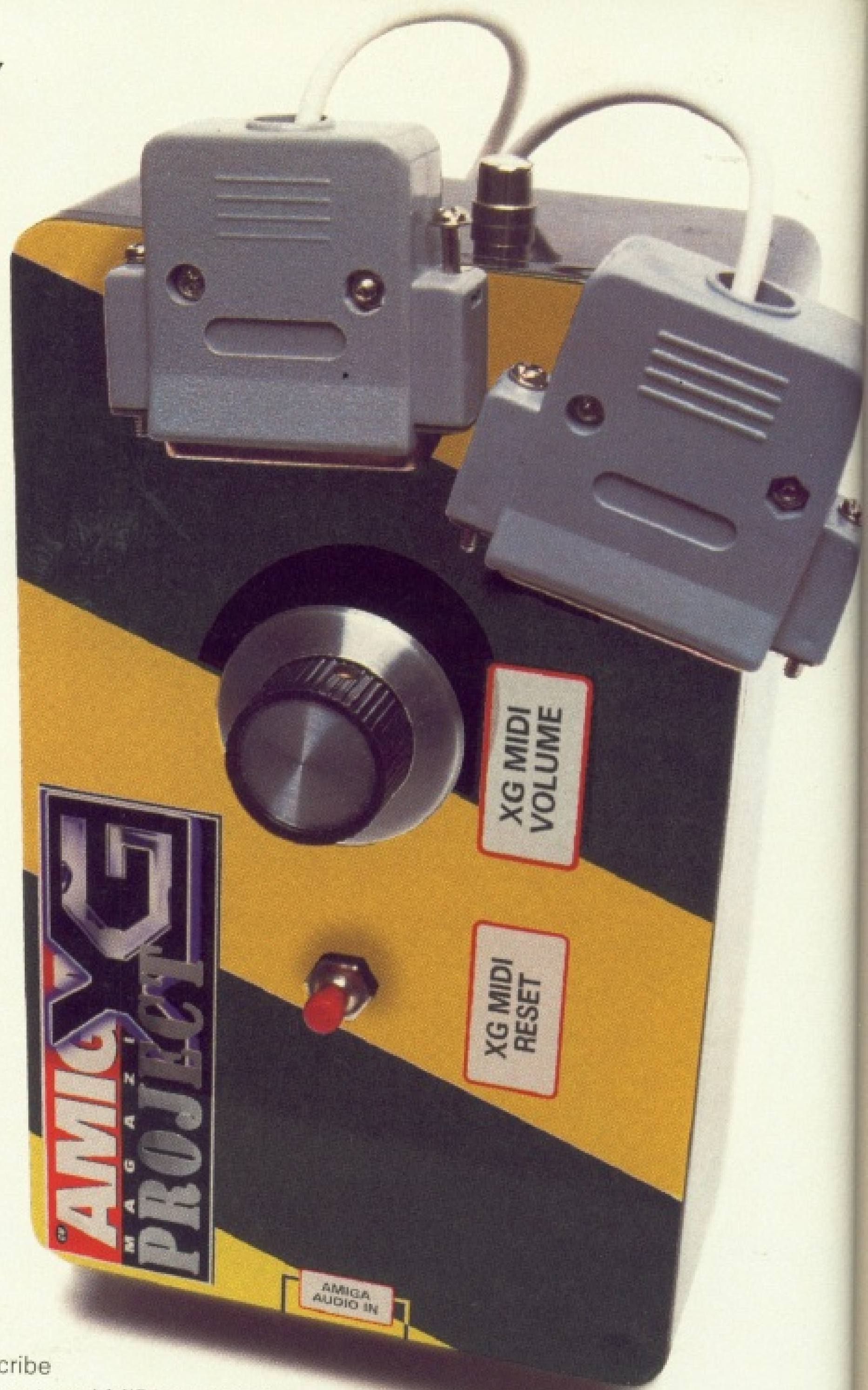
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D.I.Y Sound Card

Our new DIY series starts in style this month with 'Project XG': an ultra high quality sound card for use with all Amigas. So if you want the best sounding Amiga ever it's time to get out that soldering iron...



▶ **This is what the 'Project XG' looks like. With the finishing artwork, Project XG looks good and sounds amazing.**

Welcome to DIY Scene, a regular new DIY hardware section exclusive to CU Amiga Magazine. DIY Scene will focus on the endless expansion opportunities open to any Amiga user who's not afraid of a bit of soldering and a touch of enterprise. Over the following months you find a sequence of intriguing home-grown add-ons and modifications to give your Amiga more features, flexibility, compatibility and overall power. Starting as we mean to go on, we bring you an 18-bit DSP-equipped sound card dubbed 'Project XG'. Compatible with all Amigas, from mighty A4000Ts to antique 1.3 A500s, Project XG brings state of the art audio technology to your Amiga for very little cash. Everything you need to know about how to put it together is here, including a parts list order form.

Project XG parts list

- 14 pin IC socket for RS232 to MIDI
- MC1489 RS232 to TTL IC
- 2 row 36 pin strip/header for DB50XG
- Dual Pot Log 10K for volume control
- Pointer knob for volume control
- 23-Way D-type plug for disk drive port
- 25-Way D-Type socket for serial port
- 23-Way D-type shroud
- 25-Way D-type shroud
- MB5 plastic project box
- 4 x Chassis RCA sockets audio in/out
- 4 Wire telephone cable (1M)
- 10 x 4.7k resistors
- Momentary push switch for MIDI reset
- Stereo audio cable (1m)
- 4 x stick on feet
- 2 x plastic cable ties

The aim of this feature is to describe how to create an external MIDI 'module' which will attach to any Amiga. This module will provide stunning audio quality based on the Yamaha DB50XG. Not only is this the best an Amiga has ever sounded before but it's going to cost under £120.

Readers of the CD-ROM edition can check out the quality first hand by playing the audio tracks in a standard CD player. See the accompanying table for a track listing comparing standard Amiga output with that of the Yamaha.

The DB50XG does not play samples like a 'standard' sound card, instead it has 4Mb of the highest quality 18-bit instruments built-in. We send the DB50XG instructions to play those instruments via MIDI which we'll be obtaining from the Amiga's serial port.

Digital Signal Processors

The DB50XG is capable of playing 32 instruments at the same time. It manages this with absolutely no mixing noise or loss of quality associated with 'mixing' techniques used with native Amiga audio output. As if that isn't enough, the DB50XG's built-in Digital Signal Processors (DSPs for short) can apply a range of sound effects to each individual instrument, providing an immersive natural ambience not found in the normal audio output of the Amiga.

While it may seem a limitation that we can't play instruments other than those built into the DB50XG, the 676 voices that are present (and 21 drum kits) are of a supremely high quality. We can also use these in conjunction with the Amiga's standard audio so that custom instruments can still be used in music compositions. In order to achieve this, the module we will construct has two pass through audio jacks so that the DB50XG's sound can be mixed with the Amiga's. A built-in volume control sets the mix balance between the two.

To construct the module you will need to obtain all the parts and fit them together as per the instructions. There is soldering work involved which means you'll need a decent soldering iron. Also you must be familiar with the technique of soldering. It's not too complex a job, but a heavy hand and a plumber's iron is going to result in disaster. Please read the entire feature first to gauge whether it's within your capabilities.

We can't take responsibility for non-working projects though we guarantee that if you

Project XG features

- Amiga audio input via twin RCA/Phono sockets
- Mixed XG MIDI and Amiga audio output via twin RCA/Phono sockets
- Power and serial MIDI data obtained by disk drive and serial ports
- MIDI XG volume control and reset button on top panel
- Core audio module: Yamaha DB50XG

Yamaha DB50XG specifications

- Output: 18-bit 48KHz sampled output
- Polyphony: 32 voice maximum polyphony
- Parts: 16 parts maximum, dynamic voice allocations
- ROM: 4Mb compressed Wavetable ROM containing ultra high quality sound samples
- Total voices: 676 instruments and 21 drum kits.
- MIDI compatibility: Complies to General MIDI, Roland GS and Yamaha XG MIDI.
- DSPs: 3 Digital Signal Processors to handle a range of effects on any or all of the instruments being played. Software selectable 'sends' and 'returns' to each effect.
- Effects: 11 types of reverb, 11 types of chorus and 42 types of 'variation'.
- Signal to Noise ratio: in excess of 90dB
- MIDI interface: 32500 baud serial TTL MIDI input

construct the module precisely as our instructions dictate, it will work. All of the parts, except the DB50XG, have been sourced from Maplin to make them easy to obtain in one go. In addition to a soldering iron and solder, you'll also need access to a drill and some basic tools such as wire cutters, an adjustable spanner and screwdrivers. Presuming you have what it takes, it's on with the show.

Construction:

The simple way of getting the parts is to buy all of the electronic components from Maplin and the DB50XG from Linefeed (see the order form on page 29). However you can of course buy equivalent components from whichever supplier you like so long as they match the specifications of the ones which we've listed here. Please don't telephone us asking whether we know if Joe's Electronic Wholesalers parts are the exact equivalent… as we dont!

After you buy all the parts, you may be a little bewildered with what you've purchased. Don't worry, it will all come together without too much difficulty. The first thing to do is drill all of the holes in the project box. See our diagrams and the suggested drill bit sizes. With each of the holes, remember it's better to drill too small at first, than too large. You can then try and fit the appropriate component to the holes and then enlarge them as needs be until the component fits.

Firm mounting

In total we have four holes on the bottom of the box. The DB50XG circuit board itself comes with four black pegs which fit into the holes at each corner of the circuit board. The pegs will then fit into the holes drilled in the project box and we should have a firm mounting of the circuit board. Remember, the DB50XG goes in with the chips facing down and we need to stick the rubber feet in our parts list on the bottom of the project box so that the pegs won't be pushed inside when the box sits on the table.

The easy trick for pinpointing exactly where to drill the holes is to fit the pegs to the DB50XG and dab them with tippex or nail polish. Then quickly touch the pegs to the box. You should then have four marks indicating exactly where to drill.

Don't fit the card or stick the feet on until later as we'll be doing more drilling. A tip when drilling the project box is to use a small bit first. It's much easier to get the correct placement. You might like to use progressively bigger drill bits until the size is reached otherwise holding the box down while the bit goes in is difficult and slightly danger prone. Be sure your hands are clear of the drill bit! A battery operated drill is far easier to control and much safer, so use one of those if you can.

We have two holes on each end of the project box and these are to screw the phono/RCA jacks in. It's not critical exactly where they are but make sure there's space left for the two small cable holes on the 'Amiga' end. We now need to decide which end is which. One will have two extra small holes, the other won't.

Next, the top panel needs to be drilled. Cut out the top panel artwork we've made here and temporarily stick it on the top. Make small holes where the reset and volume control positions are, and mark with tippex/nail polish. Take away the artwork and drill the holes… Voila! We need one more hole, so get the volume control 'pot', and you'll see it has a small metal lug sticking up so it doesn't quite fit in the hole properly. Use the tippex trick and fit it in the hole so you have a small mark. Then make a very small hole so that the lug fits in that hole. It's there so the volume control will never slide around if the nut becomes loose.

If you're lazy, you might like to just cut the lug off. Naturally if you drill this hole, make sure that the pot is correctly aligned. Imagine the artwork on the top panel the right way up – the section of the pot with the electrical terminals will face towards you when it's mounted.

Figure 1

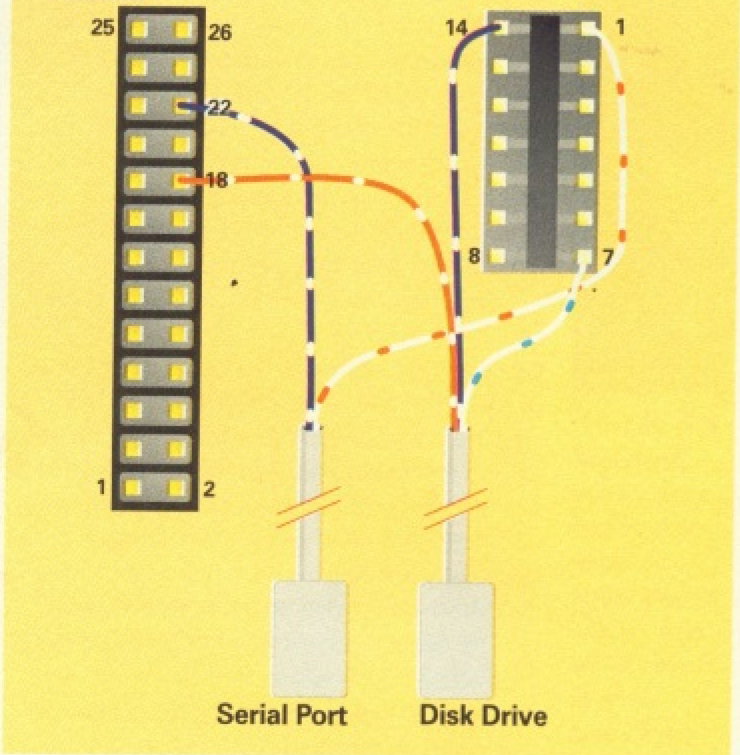


Figure 2

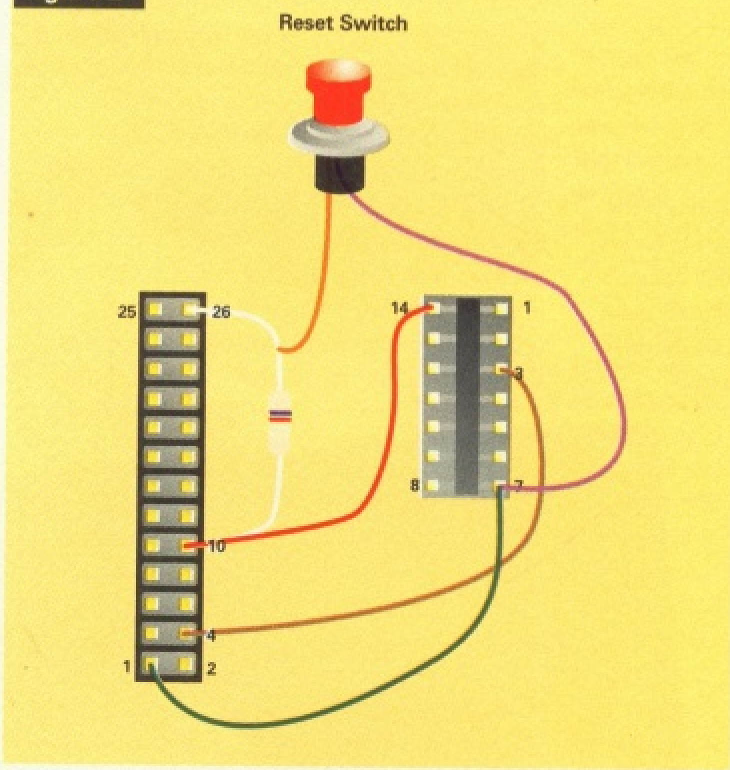
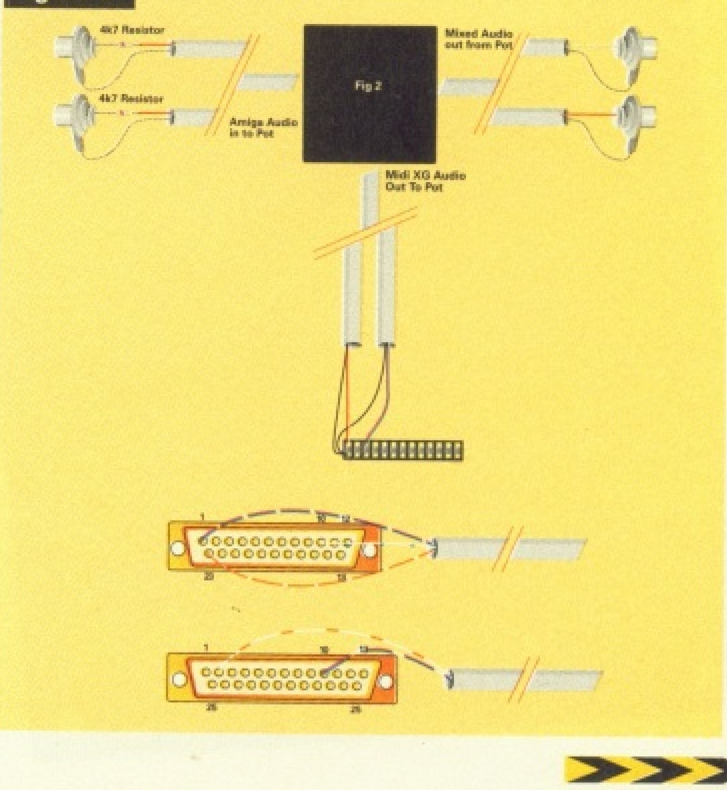


Figure 3



Yamaha's 'XG' extended General MIDI standard

Look out for this logo. It's the 'XG MIDI' logo used to indicate XG compatible hardware and software. XG is an extension of the General MIDI standard, designed to make MIDI instruments more compatible with one another. The General MIDI rulebook includes a list of sounds that must be included in all General MIDI instruments. These are split into various categories such as piano, organ, bass, drums and so on. The idea is that you could compose some music on a General MIDI instrument, and that MIDI file could be used to play the same music on a General MIDI instrument from a different manufacturer.

XG MIDI is Yamaha's own development of GM. XG adds even more sounds and also throws in things like realtime effects into the bargain. XG synths and sound cards (such as the DB50XG used here) also offer control over the playback of each sound. This can be taken to some extreme measures, so that previously ordinary voices like trumpets or pianos can be turned into big fat abstract techno noises.

XG instruments can be used with all MIDI sequencers. No specific XG or GM support is required, although it's handy if you have it – Camouflage is one Amiga sequencer with built in GM support (see screenshot below).

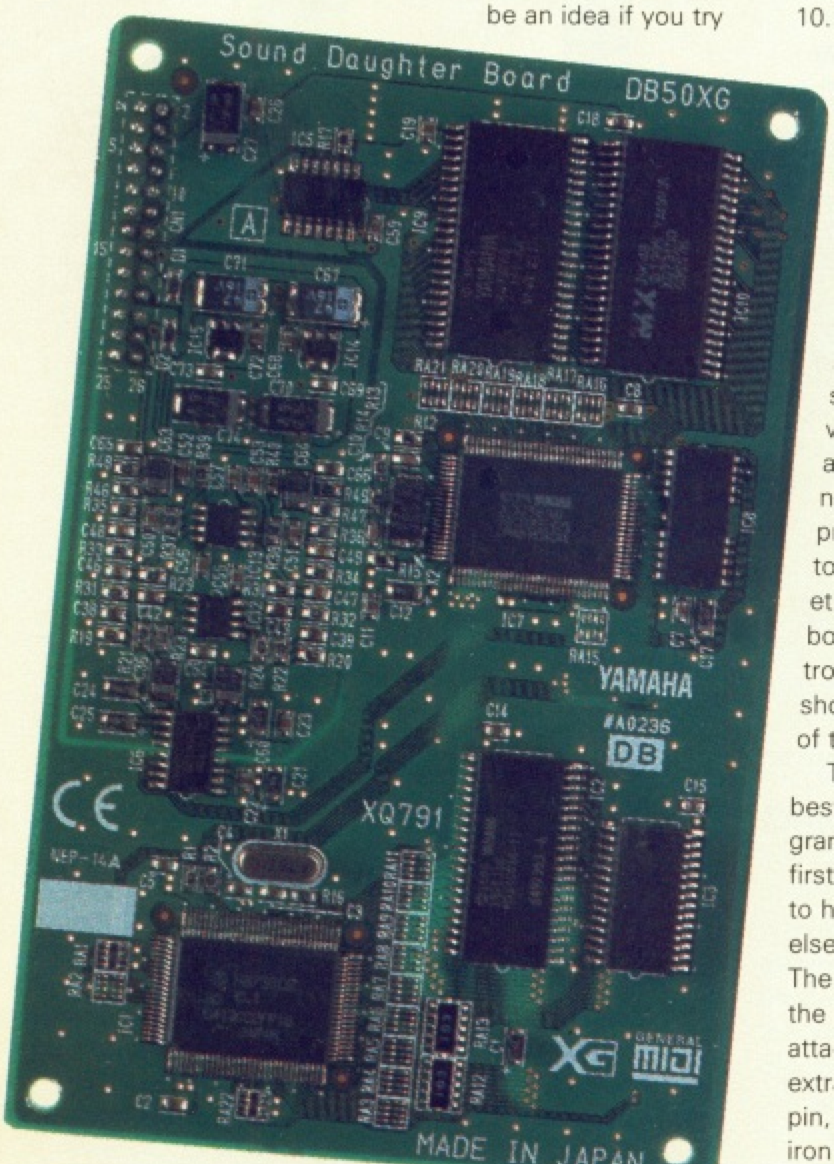
Disk drive and serial

Take the length of '2 pair' telephone cable and cut about 10cm off the end. We'll need the wires within for hookable wire later. Take what remains and cut it exactly in half. The two longer sections of cable will be those used for the disk drive and serial leads. We'll start our soldering with the serial and disk drive plugs, and their cables.

You'll need to be versed in skinning back cable and 'tinning' the ends. Apply some cutters and delicately nip the outer white sheath of the long telephone cable sections about 5 cms from the ends. You should then be able to grip the cable and skin off the sheath altogether exposing the coloured wires at each end. Next we need to tin the individual conductors. We'll only need three wires to the disk drive connector and two to the serial.

The serial lead will use the wires coloured blue striped with white, and the white wire striped with orange. The disk drive lead will use white stripped with light blue, orange striped with white, and blue striped with white. We're mentioning colours to identify wiring a bit easier later on. You will need to double check with a multimeter though. If you're using different cable ignore the colours, as you'll have to identify them with a multimeter or their own colours yourself.

Skin the last 1cm of insulation off each of the exposed conductors. Apply a hot soldering iron and solder at the same time to the ends slightly, so that each wire is just coated with solder. Make sure there's no excess blobs. If you've not soldered much, it might be an idea if you try practicing on those off-cuts beforehand. As is the case with all soldering, the trick is to do it as quickly as you can so that the subjects are hot for the shortest length of time possible.



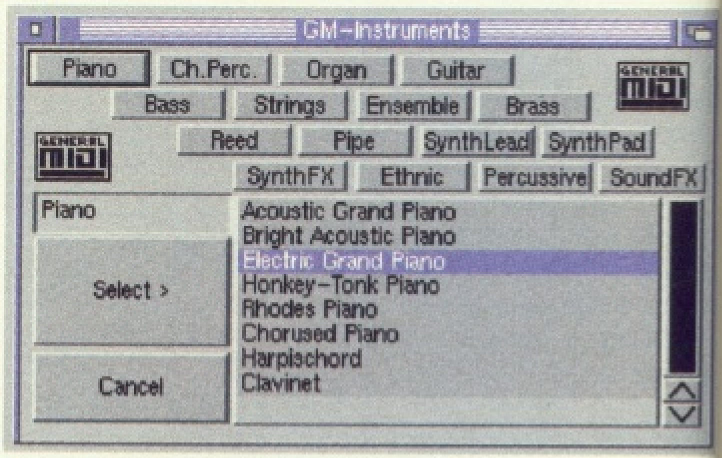
▼ This is the core of the project: Yamaha's DB50XG sound card daughter board.

Molten solder

Now take the 25 pin D type connector and hold it down somewhere, a vice or something will do. Fill the small solder lugs with solder that correspond to pin 2 and pin 10. There are tiny numbers written on the plastic next to the pins, use that as a guide. Then hold the iron to the lug keeping the solder molten and push the white wire, striped orange into pin 2 and the blue wire, striped white into pin 10. Hooray!

We need to do the same procedure to the 23pin D type connector for the disk drive. This time attach the dark wire, striped white to pin 23. The orange wire, striped white to pin 12 and the white wire, striped blue to pin 3. You can now assemble the shells for the D type connectors. They screw together neatly with provided screws. In order to fix the cables to the project box, drill two small holes ether side of the cable as it goes into the box. Then thread one of the cable ties trough the holes, when tightened this should hold the cable firmly to the bottom of the case.

The tricky internal part of the project is best described with the accompanying diagrams. The trick to wiring this up is to fix first the chip socket to a vice or something to hold it down (BlueTak if you have nothing else). Attach all of the wires to this socket. The same principals apply as to wiring of the sockets. For each of the pins we need to attach a wire, to tin it first. Apply a little extra solder to it, hold the iron briefly to the pin, hold the wire to the pin, remove the iron, and when it's cooled the wire is attached. Keep the wire still while the solder is cooling or a bad joint can result.

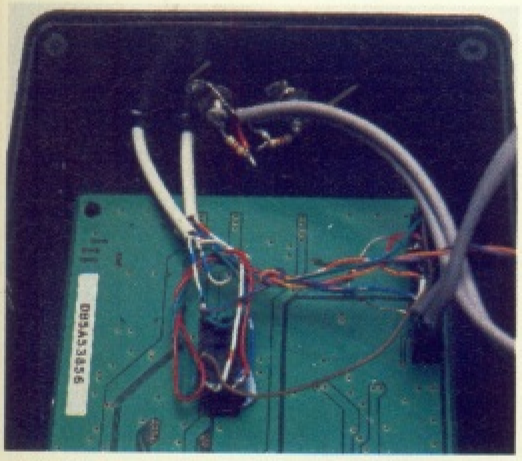


▲ Camouflage has built-in General MIDI specific voice selection, which makes things even easier as you can choose voices from an internal list.

Upside down socket

Our diagrams are based on the chip socket being upside down. That's because this is how you will solder to it. The DB50XG will be placed in the box with its connector nearest to the cable holes. We have a strip of metallic pins in the parts list. You will need to break off twenty six. That's thirteen rows of two pins. This will be the main 'header' that will be soldered onto. When we're finished, and everything has been tested, it will be plugged straight into the DB50XGs connector. On no account do this until you've gone through the testing checklist.

The first diagram illustrates the external serial and disk drive cables attached to the DB50XG header and the chip socket. Wire up as per this diagram first. Then move onto the interconnection diagram, Fig.2, which shows wires going between the chip socket and the DB50XG header. Use the conductors inside the off-cut of telephone cable we made to start with. Make sure you cut it into the approximate right lengths, skin and tin the ends first and then connect the wires between the chip socket and the header. You'll notice there's a resistor going between two pins on the DB50XG header. Just tin the ends of one of the resistors and attach to the pins. The reset switch needs to

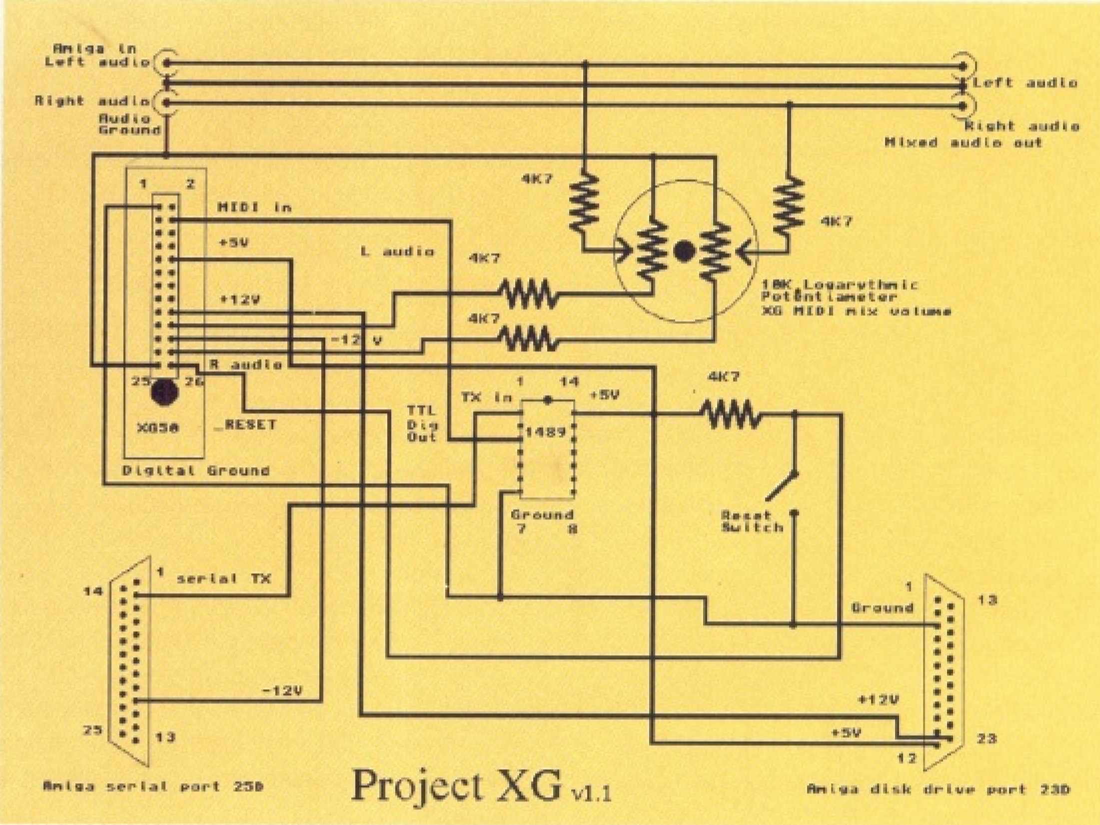


▲ Here's what the internals are going to look like. The cable ties haven't yet been attached to fix the incoming serial/disk drive cables to the bottom of the box.

be fitted to the lid and wired up from this diagram also. Again measure out enough spare wire to reach. Skin, tin and attach to the reset switch and the header.

The most difficult part of the project is the wiring up of the audio cables. The audio cable is a stereo cable with two separate conductors. Place the lid next to the project box, measure out and cut off enough audio cable – and some slack, to go from the RCA/phono sockets at each end of the project, to the volume control on the lid. Cut another piece to go from the DB50XG header to the volume control. To get the hang of dealing with this cable, wire it up to the RCA sockets first. The trick here is to separate the conductors by gently pulling them apart. Then nip the outer sheaths with some cutters to weaken it, and skin off.

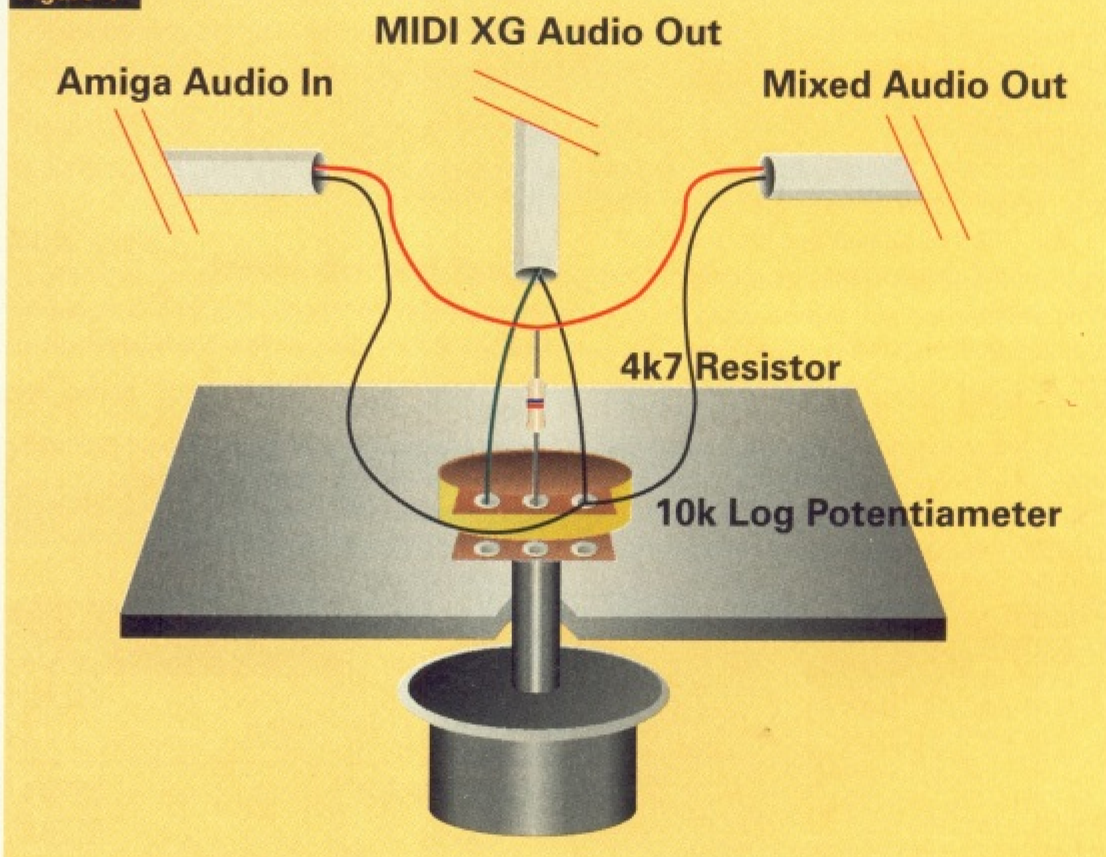
Unlike the other wire, you'll have an earth braid of lots of wires exposed. Gather this between thumb and finger and twist into a manageable wire. Skin off the central conductor as normal. Now tin the earth braid and central conductor. Be careful not to heat the braid up too much or it will melt through the conductor and short it. Apply some solder in advance to the earth lugs and central conductor lugs of the RCA/phono sockets. Do this with them mounted on the box first. One pair has resistors attached to the central lugs. Cut off excess wire from each end of a resistor and tin it, solder one end to the central lug. Solder the conductor wire to the other end of this resistor as per our diagram.





◀ For the more techie types, here's a circuit diagram of the Project XG wiring. Note that crossing wires are not connected unless there's a blob where they cross.

Figure 4



◀ Since the wiring of the volume control is fairly complex, we've only shown one channel of the stereo wires. Each channel should be wired up according to this diagram, only they should be wired up to the two seperate sets of solder pads on the volume control.

Wiring the volume control

Prepare all of the ends of the audio cables including those which we'll be connecting to the volume pot next. Skin off more sheath at the volume pot end. Tin it all ahead of time and tin all the pads on the volume pot. This section is tricky and looks complex when it's finished. It's not that complex if you look at our diagram, Fig.3, but the diagram only shows one channel for the sake of simplicity. You see two sets of three solder pads on the Pot, the diagram is for one set and is simply duplicated for the other. The idea is that the diagram shows one set of the audio cable conductors, so separate the ends and wire up the bottom pads first. You'll see that there's three braids connected to the same lug. This can be tricky and if it proves too much to solder them all on before others fall off, then cut the ends off, twist all of the braids together, tin them together, and then wire that to the pad.

Double check your work on one set of pads according to the diagram before wiring up the second set of wires on the top set of pads. When it's all done it will look quite a mess, so make sure that your resistor is short enough so that it wont short on any of the other pads or exposed earth braids and so on. All that remains is to take the spare audio cable end and solder to the DB50XG header as per the diagram, Fig.3. You're done now, so you might like to tape the wires to the lid and the side of the box to make it a bit neater. It's always going to look a bit of a mess since we aren't using a circuit board.

It's time to go into the testing phase to check and repair any incorrect wiring that may have been performed up to now.

Check list

To perform these checks, you'll need a multimeter. The following checks will be performed by placing the 'meter in 'continuity' mode – where it should beep when the probe tips are pressed together. For now it doesn't matter which way around the probes are used, the connectors will not be plugged into the Amiga.

Press one probe to pin 2 on the serial port connector. Place the other to pin 1 on the chip socket. We should hear a beep. Proceed through all of the wires in Fig.1,

placing the probe at each end of the illustrated wires, one on the D type connector pin indicated and the other to where the wire is illustrated as going in our diagram. We should hear a beep for every wire.

It should now be safe to plug the connectors into the Amiga. Make sure the Amiga is off first and that the MC1489 chip is not fitted to the socket or that the 26 way header is not plugged into the DB50XG. When turning the Amiga on, if it doesn't boot instantly as usual, then turn it off immediately and start checking for wiring problems. To perform these checks we'll need to set the multimeter to the DC voltage range. We'll tell you where to place the multimeter probes and the value that should be displayed on the 'meter in volts. Don't panic if it's slightly off – it should be in the ball park.

Holding the black probe to pin 1 of the DB50XG header, place the red probe on pin 6 of the header, you should see around 5 volts on the meter. Keeping black on pin one, place red on pin 18, we should see around 12 volts on the meter. Now place red on pin 22 of the header, we should see 12 volts on the meter, note the minus. You can expect the plus and minus 12 volt lines to be a little lower than 12. Place red on pin 26, we should see 5 volts.

If those checks work, we're not going to blow up the DB50XG. Keep the black on pin 1 of the DB50XG header and place red on pin 14 of the chip socket. We should be seeing 5 volts.

You're ready to power down the Amiga. Now plug the chip into the socket, making sure the circle at one end goes to the end you've been working as pin 1 and 14 of the socket. At this point leave the chip and socket loose, once everything works you can glue it to the side of the project box with silicon or the like. Now fit the DB50XG into the project box and plug in the header. Make sure that the pins you've been working on as pin 1 and 2 are towards the closest end of the DB50XG circuit board. Plug your hi-fi into the phono sockets at the other end of the project box to the cable holes.

Try before you buy

On this month's CD are two audio tracks. You can play them in your CD-ROM if the audio output is connected to a hi-fi or alternatively you can place CUCD14 in a normal hi-fi CD player and locate them as tracks 2 and 3.

The first track is the sampled output of the Amiga playing with GMPlay and a replacement high quality sample set. The second track is the sampled output of Project XG playing the same XG MIDI file. Incidentally GMPlay consumed over 5Mb of memory and quite a lot of CPU time to play this MIDI. Project XG, used less than 100K and next to no CPU time at all.

If you're going to give this comparison a fair trial, you will need to either use headphones or a proper hi-fi. With built-in monitor speakers or small powered units, you wont really get the full benefit of the test.

The track itself is called Mr Bones, composed and sequenced by Michael Walthius, you can find further information on his home page at http://www.keybdwizrd.com. Michael is a professional composer and regularly utilises XG MIDI for his compositions. More of Michael's compositions are on the cover CD-ROM.

There are more A/B tests on the CD-ROM but not as audio tracks. We've included XG MIDIs to play with GMPlay and accordingly some MPEG audio layer III samples of the Project XG output of the same MIDI files. In this case it's worth noting that you will need a fast Amiga to play back the 'mp3' files in real time. Otherwise, an option is to decode them to your hard drive and play with Play16. Documentation and all the required software is on the CD-ROM as usual.

Start her up Ned!

Power up the Amiga. Watch for a normal boot on the Amiga and any excessive heat on the DB50XG or the chip. If you've gone through the checklist and made every effort to get the wiring right, there should be no problem. Now you need to press the XG MIDI reset button. Load up MIDIPlay on the Amiga, it's on our Cover CD and floppy disks. Load in a provided MIDI file and play. In a few seconds you should hear some fantastic music. If not, try the volume control on the top panel, if there's still nothing then unplug it all and go through the diagrams and check your work all over.

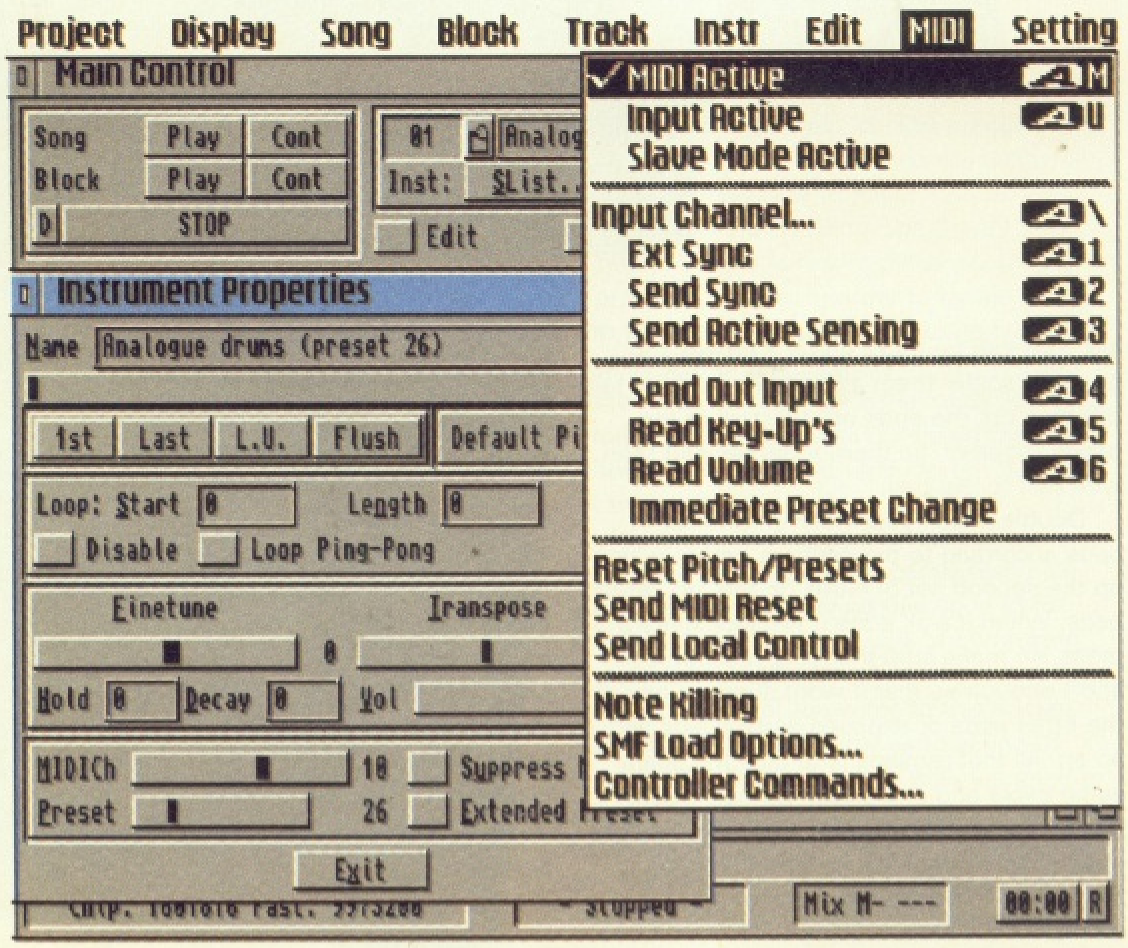
Once it all works, the world is your oyster music wise. General MIDI and XG MIDI are widely used standards and there's a wealth of documentation and software on it. You can start by checking out this month's Sound Lab on page 88 of this issue, where we make a start at documenting how to drive Project XG from your Amiga to make music. There's a demonstration SoundStudio/OctaMED module on the disks and the CD which shows how some of the more interesting voice and effects parameters can be controlled, as well as showing the basics of controlling Project XG from OctaMED SoundStudio. Further user guides will follow in subsequent Sound Labs.

This isn't the end of Project XG. We're heading up a campaign to encourage developers to support XG MIDI in their software. Everything from music programs to games where the soundtrack can be a superb realistic sounding MIDI XG effort. We'll be continually supporting Project XG and keeping you up to date with new developments. Naturally you'll always find the latest software on our cover CDs too.

Of course, we'll expect you to be raising your game now when it comes to contributions for the CD audio tracks! If you've made a track entirely using your Amiga and project XG, all you need to do is send us the MIDI & sample file from your sequencer or tracker, and we can listen to them in glorious 18-bit stereo. Who knows, next month's CD audio track could be yours!

Stay tuned for plenty more exciting DIY Scene projects coming your way exlcusively in CU Amiga Magazine. ■

Mat Bettinson



▶ You can use Project XG with any MIDI sequencer, including OctaMED SoundStudio. This screen shows how to set up a MIDI instrument in SoundStudio. An example OctaMED song is on the cover disks and CD.



How to use your Project XG box label

Our advice would be to cut the whole page out of the magazine, then cut your order form from the page and send it off immediately! Next, stick the label onto some card to reinforce it. Now cut around the dotted white line and cut the holes from the middle. You should have already drilled the holes in the correct place on the box beforehand so everything should fit perfectly. That's it, a professional MIDI module made by you!

Cut Here

Order Form

Date:

Full Name:

Address:

Postcode:

Telephone:

I authorise you to debit my credit card account for the cost of the goods despatched.

Access/American Express/Visa/Switch/Connect (delete as required)

Credit card number:

Expiry Date: Name on C.Card:

Signed:

Switch Issue No.

Please make cheques payable to "Maplin MPS"

Maplins: Please supply the following

Part	Unit Price	Quantity	Order Code	Total
MC1489P	£0.93	1	YH90X	£0.93
14 pin IC socket	£0.48	1	FJ64U	£0.48
2x36 pin strip/header	£1.10	1	JW62S	£1.10
Dual Pot Log 10K	£2.09	1	JM83E	£1.19
Pointer knob	£0.87	1	RX02C	£0.87
23-Way D-type plug	£0.79	1	JZ17T	£0.79
25-Way D-Type socket	£1.35	1	YQ49D	£1.35
23-Way D-type shroud	£1.05	1	JZ25C	£1.05
25-Way D-type shroud	£1.05	1	FP29G	£1.05
MB5 plastic box	£3.56	1	YN40T	£3.56
Chassis RCA socket	£0.44	4	YW06G	£1.76
4 Wire tele cable (1M)	£0.26	1	XR66W	£0.26
10 4K7 resistors	£0.04	1	M4K7	£0.04
Mom. push switch	£0.52	1	FH59P	£0.52
win audio cable (1m)	£0.39	1	XR21X	£0.39
4 Stick on feet	£0.44	1	FW38R	£0.44
Cable tie	£0.06	2	BF91Y	£0.12
Total: (£15.90) including £2.95 carriage=				£18.85

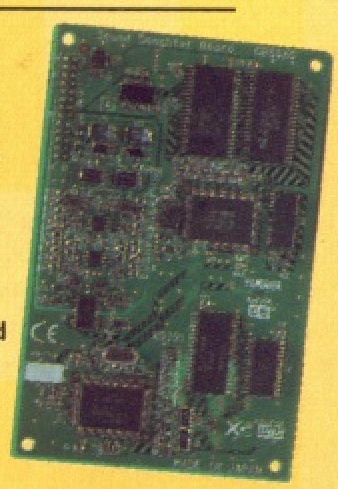
Where to get your DB50XG

The Yamaha DB50XG Wavetable card is available from:

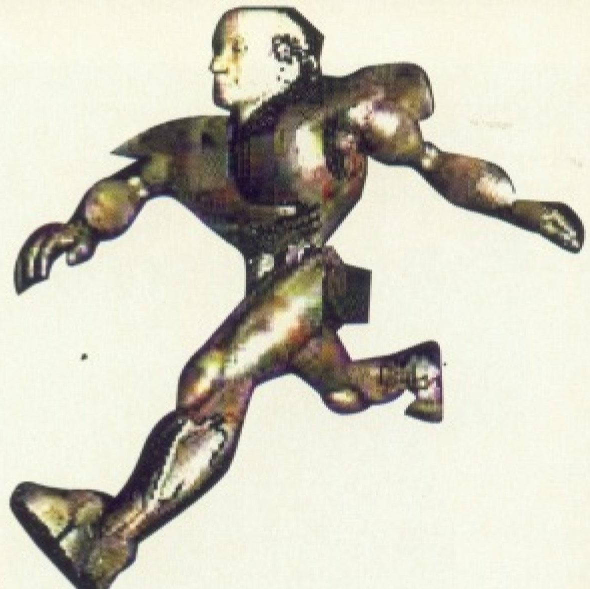
APS Computer products mail order, ✆ 01789-470955, £114.00, postage included.

Linefeed, ✆ 0171-474 1765, £99.00 postage included.

With the parts from Maplins and the card from Linefeed he total cost of the package comes to: **£117.85**



The New Faces of Amiga Gaming



The companies which used to make the big games on the Amiga have long gone. For months there has been little for Amiga gamers to be positive about, but all that is over. Take a look at the new faces of Amiga gaming...

A few years ago the Amiga was in the position that the games consoles are in now. The Amiga was the beloved machine of the computer games industry, the platform that everyone wanted to program for and that every game had to be a success on. It was powerful and colourful and allowed new and attention grabbing games to appear. The popularity of gaming meant that there was a lot of money to be made, and the big companies moved in to make it. As the market for Amiga games started fading and the console market asserted its dominance, the old traditional players moved from the Amiga.

Many of the big companies producing for the PC and consoles were originally Amiga companies. Bullfrog started on the Amiga with the likes of Populous, now as part of the Electronic Arts empire they are valued in the tens of millions. Ocean, Gremlin, Psygnosis, Domark, Acclaim, the list goes on. Apart from a few final conversions which will turn up over the next few months, we are unlikely to see any more from these big software houses in the forseeable future.

In the shadow of giants

Things have looked bleak for a while, but now things are changing. Several companies have taken a look at the market and decided that it isn't quite that dead after all. Seeing that a gap had been left by the departure of the big companies, some smaller companies have stepped into the breech.

Rather than being large coding houses like the super corporations producing for other platforms, these tend to be mainly concerned with publishing rather than coding. The Amiga has always counted the enthusiasm of its advocates as its biggest strength, and the disappearance of those larger companies has just forced the most enthusiastic Amiga coders to go it alone. This has meant a return to the culture of 'bedroom programmers' which produced some of the innovative designs of the early Amiga era.

We have been taking a look at some of the companies which are involved in this return to the games industry. Can they succeed in the shadows of giants? The market they are in is certainly tricky, but they all have the will and enthusiasm to give it a go. We decided to take a closer look at three of them to see what makes them tick and where they want to go.

Alive Mediasoft Ltd

Alive are the newest company to hit the Amiga scene. They have been set up by Steven Flowers and Andrew Reed, specifically to take on the job of publishing Steven's game developments now that his brother's Direct Software are no longer in a position to publish them.

The first title of the line will be the horror adventure Haunted. Due for release on Halloween, Haunted promises to bring big production value multimedia gaming to the Amiga. People are probably going to be impressed by the beautifully rendered high resolution graphics and the spooky murder mystery weekend gone wrong, but what is really likely to make people take notice of

Team: Shadow Elks

- Shadow Elks, Sweden
- **Current project:** In Shadow of Time
- **Signed to:** unknown



Monkey Island style graphic adventure with a comedy time travel story line.

Team: Prelusion

- Prelusion, Sweden
- **Current project:** Gilbert Goodmate
- **Signed to:** unknown



Monkey Island style graphic adventure

Team: Alive Mediasoft

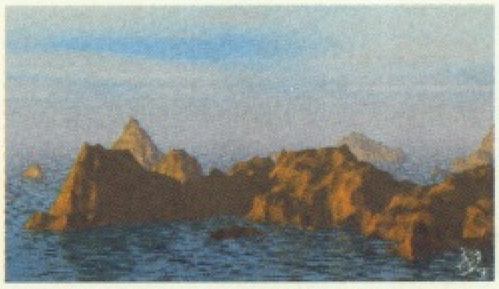
- Alive Mediasoft, England
- Current project: Haunted
- Signed to: Self publishing



18 certificate horror adventure which comes on an amazing 5 CDs.

Team: Black Blade

- Black Blade Design, Italy
- Current project: Shadow of the Third Moon
- Signed to: Titan HB



Fast Voxel flight sim, arrived just too late for a preview. More next month.

Team: Team Invictus

- Team Invictus, Hungary
- Current project: On Escapee
- Signed to: In negotiations



Breathtaking Flashback style adventure with some very clever graphical effects.

this game is its size. Haunted comes on five CDs to hold the huge amount of music, rendered animations and FMVs etc.

Alive are hoping that when they get into their stride they may be releasing games as regular as every month. To some people this may sound ever so slightly ambitious but it is, in this case, perfectly feasible. Alive have spent some time working on, and have now near enough perfected, a transparent Macintosh emulator.

The idea as required is that it emulates only as much of a Macintosh to run Mac games. By bundling the custom emulator with a Macintosh commercial release, Alive will be providing people with a way of running Mac games as easily and simply as if they were Amiga games. They say that you won't even know the game is written for a Macintosh. The beauty of this scheme is that it allows them to effectively convert almost every Mac game to the Amiga without having to recode a byte.

Initial planned releases include Phantasmagoria, which does look as though it's set to go ahead, and also Doom, which is currently under negotiation. There are some legal complexities that need to be overcome, but hopefully Alive should have brought the above titles, not to mention games like Dark Forces and Duke Nuke 'em 3D to the Amiga before a year has passed.

Sadeness Software

Sadeness have been around for a little while producing CD-ROM titles such as the excellent Hidden Truth and the notorious Women of the Web. Although they have made some quality CD-ROMs in their time, they were never really in a position to challenge Epic Marketing or Weird Science. Competition in the games publishing arena is a lot less intense at the moment, so they decided to take to that arena instead, signing programmer Paul Burkey in the process.

Paul Burkey's Foundation is the only definite title Sadeness have in the works, but they are intent on bringing more titles in. They are in negotiation with several other programming teams and were confident of finalising the signature of Team Invictus and their very impressive adventure On Escapee.

Sadeness want to offer any programmers a lot of support. Paul Burkey told us that what attracted him to Sadeness' offer was that they were enthusiastic and were willing to back it up by immediately supplying him with the hardware he needed. They have also been working with him on the presentation of the game. Larger games companies tend to have teams of programmers, artists and musicians beavering away on a title, and to a large extent the layer of professionalism this adds goes a long way to making a game seem finished.

Richard and Kris of Sadeness software have been working away at intro sequence graphics and sprite design, hopefully giving Foundation enough of an edge to be a real hit. In this manner Sadeness hope to concentrate on quality not quantity.

One interesting part of Sadeness' planning is the type of titles they want to sign. They say that they are not interested in signing games which just show the Amiga playing catch up with the games consoles, but rather want to concentrate on acquiring games which depend on quality of design and gameplay. Foundation and current target On Escapee are both titles which could have something to offer on other platforms, allowing Sadeness the security net of conversions. On Escapee already has a PC version in the works, although it is not expected until approximately a year after the Amiga version.

Islona

Islona is the new games label set up by Epic marketing, the CD-ROM company behind

Team: Ablaze

- Ablaze, Slovakia
- Current project: Diversia
- Signed to: Vulcan Software



Real time wargaming Command and Conquer style. PPC support promised.

Team: Paul Burkey

- Paul Burkey, Britain
- Current project: Foundation.
- Signed to: Sadeness Software



Strategy conquest game with more features than you could shake a stick at.

Team: DSP

- DSP, Sweden
- Current project: Almagica
- Signed to: Vulcan



Action strategy game in the Warcraft/Command & Conquer mould.

Team: ClickBoom!

- **ClickBOOM!, Canada**
- **Current project: Myst**
- **Signed to: Self publishing**



Top surreal adventure game comes to the Amiga. Best selling CD-ROM ever.

Team: Underground

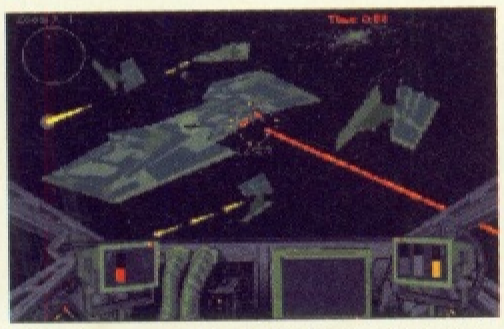
- **Underground Software, Italy**
- **Current project: Golem**
- **Signed to: In negotiations**



Futuristic interactive movie using innovative animation format.

Team: GeoSync

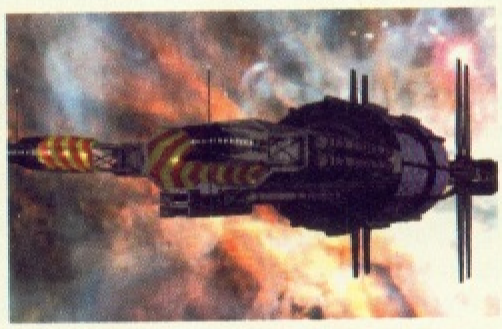
- **GeoSync, Australia**
- **Current project: Star Fighter**
- **Signed to: D'Yammens Reign**



Wing Commander-style fast action 3D spaceflight/combat game.

Team: Digital Anarchy

- **Digital Anarchy Systems, England**
- **Current project: Explorer 2260**
- **Signed to: not signed**



Monumentally ambitious Babylon 5 inspired space war/trading game.

the very successful Epic Interactive Encyclopaedia. Epic were inspired to move in to the games market for two reasons. Firstly, they noticed that every interesting new title announced for the Amiga seemed to be coming from Germany and was never being released here, and secondly they decided that should the Amiga games market recover enough for companies such as Electronic Arts to return, they would find Epic there first raking in all the cash.

Epic have been bringing some of these titles over to these shores in English publication deals and have been working towards Europe wide distribution deals with some of the European games houses. They are bringing titles such as Flying High, and this month's CD game demo Sixth Sense, and are busy negotiating with numerous developers around the continent.

High street hit

The latest developments with Islona/Epic is a slight change in emphasis. They have been negotiating with top Amiga games distributor Guildhall leisure and have arranged distribution with them for Kargon. This represents an important move as it means Islona now have a title available in high street shops, but the difficulty they had in arranging high street distribution has lead them to concentrate on mail order. The flip side of their deal with Guildhall is that they have offered to lend them their CD expertise..

Although we have all heard about the huge strength of the PC games market, when you actually compare figures you find that the PC market isn't as much stronger as you might think, it is more a matter of direction. Sure when a really major title hits the PC it can sell by the bucket load, but average titles on the PC just don't sell too many. Sales of Amiga CD-ROMs are actually reasonably healthy in comparison – Epic say that they expect to sell at least 1000+ units of a CD even if it is a flop.

Epic and Guildhall are hoping to tap into some of this market by releasing some Amiga titles through Guildhall's distribution network to the high street shops. See the news pages for more of this story.

The games

The other aspect of the industry is of course the programmers. The fascinating thing about the Amiga games market at the moment is that in an odd sort of way we have come full circle.

The strength of the Amiga in the early days was that it allowed anyone with minimal resources to write software for it. The 'bedroom' programmers that started up working on their home computers have become the software moguls of today, and have all left the Amiga for pastures new. But whereas when a console fades in popularity there aren't going to be a lot of enthusiasts with the expensive development system required to write their own games on it. An old Sega Game Gear doesn't even have a keyboard, let alone random access read/write storage devices and an operating system. You may also find it tricky to buy a compiler on a SNES cart. Amiga users on the other hand tend to have everything you need to write a game readily available. We are hoping that amongst the entries to last month's win a PowerUp board competition will be the odd promising game.

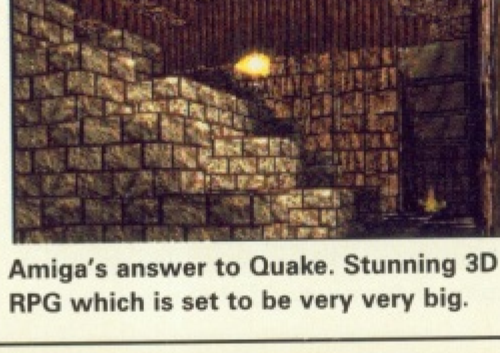
It is interesting to notice the rise of teams from some of the traditionally poorer European nations such as Poland and Hungary, suggesting that people there haven't moved wholesale to the latest trendy platform. There also seems to be a lot of interesting work going on in countries such as Italy and Germany which have never had a huge history in the games industry.

A few months ago it looked like, before long, Vulcan would be the only software house left on the Amiga. Now companies like Islona and Titan seem to be signing up a new game every few days, and Canadian company ClickBOOM are promising to bring one or two of the top cross platform titles to the Amiga. More and more companies want in. Are we now looking at a revival of the Amiga as a games machine? Only time, and the ability and enthusiasm of these companies and their coders, will tell. ■

Andrew Korn

Team: Oxyron

- **Oxyron, Germany**
- **Current project: Trapped 2**
- **Signed to: Unknown**



Amiga's answer to Quake. Stunning 3D RPG which is set to be very very big.

The gaming teams

We haven't got the space to include every gaming team out there. If you have been left out, don't be offended! We may well know about you, but if you want to contact us for previews, advice or for help finding a publisher, write to: Andrew Korn, CU Amiga Magazine, 37-39 Mill Harbour, Isle of Dogs, London E14 9TZ, UK and mark your letter 'gaming teams'.

Eyetech's Summer Sizzlers Accelerators? Forget '030/50's - get ~3 x the power for £159.95! - '040/25MHz (19 MIPS) £159.95, 51 Mips '060/66MHz £399.95; Forget mem boards! - '030/MMU/FPU 25Mhz-£69.95, 33MHz-£79.95; New DIY-EZ-Tower from £99.95; 8-speed CDPlus £149.95; A1200 high speed serial port £49.95; 14.4K modems £24.95; SX32 from £159.95; RED=Price down , Blue=New product.

The All-New Eyetech EZ-TOWER

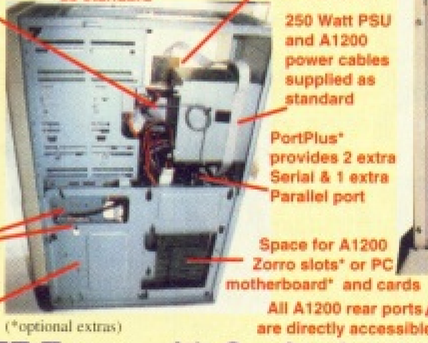
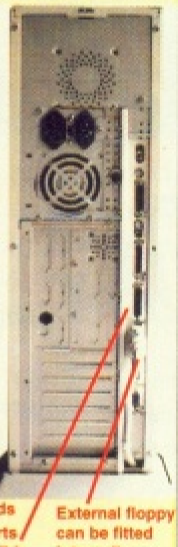
"This definitely one of the easiest solutions to building your own tower." John Kennedy, Amiga Format - July 1997

If you can use a screwdriver you could build your own A1200 tower system in less than half an hour!

It Couldn't be Easier!

- Remove the case top and keyboard ribbon cable (*No shield removal required*).
- Slot in the ribbon cable from the optional PC/Amiga keyboard interface.
- Mount existing and new hard and floppy drives and CDROM units in the bays using the screws provided.
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- Clip in the A1200 motherboard/base into the custom backpanel.
- Push on the power/HD/FDD LED adapter and the A1200 power connector.
- Put back the outer case. Thats it! ...

Now You've Got Tower Power!

(*optional extras)

NEW! Mk2 EZ-Tower with Squirrel external connector option and 250W PSU - *still only £119.95*

EZ-Key **A1200 adapter** for PC & Amiga kbds- just push in the ribbon cable!	£39.95
7 x Zorro II slots expansion board - including 5 x PC ISA slots for GG2 bridgeboard, ethernet etc. *With accelerator pass-through.* Fits most towers.	£179.95
Single Zorro II slot adapter for graphics card - *with accel pass-through.*	£99.95
- as above with built-in *EZ-Key* i/f (Both available August 1997)	£134.95
EZ-DF0 **A1200 tower DF0: diskette drive** with faceplate, cable and interface	£44.95
Squirrel adapter for EZ-Tower - with int HD/CDROM & ext Centr's 50w skts	£19.95

...Or buy a CDPlus unit (below) and get an EZ-Tower for just £99.95*

(*as an alternative to the regular CDPlus case)

SX32Mk2 & SX32Pro *Internal* Expansion for the CD32

STOP PRESS!!!

The Award Winning SX32 Pro is now even more affordable

The SX32Pro and SX32Mk2 add ...

- 33 or 50MHz '030 MMU CPU and FPU socket (33Mhz FPU socket only on the SX32Mk2)
- Simm socket for up to 64MB of 32 bit fast (60/70ns) RAM (up to 8MB fast (70ns) RAM on the SX32Mk2)
- Buffered IDE interface for internal 2.5" hard drive ***and*** second hard drive, SyQuest, Jaz *or even 8 speed CDROM* (optional extra on the SX32 Mk2)
- Sockets for RGB video (23 pin), VGA video (15 pin), Parallel port (25 pin), Serial port (25 pin), Floppy disk port (23 pin)
- Jumper-selectable for PC or Amiga keyboard input (external adapter on SX32Mk2)

. . to the CD32's existing mouse, joystick, keyboard, audio, RF, composite video and SVHS ports.

What do the reviewers say?

Amiga User Int'l	*"95% - Definitely Recommended"*
Amiga Computing	*"90% - A Dream to Use." Blue Chip Award*
Amiga Format	*"96% - Absolutely Top Notch" Gold Award*



The SX32Pro

SX32Mk2 - *sale price* - £159.95

SX32Pro-50 - *sale price* - £299.95

Genuine Amiga 89-key compact keyboard *£34.95*

SX32 floppy, hard drives 20MB-1.8GB, RAM - *Please ring*

All models include full pictorial fitting instructions,WB3.0 & utilities on CD and 'Click-and-Go' hard drive installation diskette

Special CPU purchase Limited Quantity - SX32Pro-40SE. A Special Edition SX32 Pro with 40Mhz '030EC processor (no MMU) - *Just £269.95*

AMIGA HEALTH WARNING

If you have recently fitted - or intend to fit - an IDE/ATAPI CDROM to your A1200 *(other than an Eyetech CDPlus unit)* **without** a buffered interface then your Amiga is in risk of serious damage arising in the future. The A1200 - unlike A4000's and PC's - has *NO* internal IDE buffering. On the A1200 the IDE interface connects ***directly*** to the A1200 processor & custom chips *AT ALL TIMES* which have insufficient output to drive more than one IDE/ATAPI device (and only then on a short data cable) for any sustained time period. We are now making the Eyetech *Mk2* 4-device buffered interface available separately for use with other kits and D-I-Y CDROM installations. At only £39.95 it is a small price to pay to preserve your Amiga's health.

"A buffered IDE interface is essential to avoid overloading of the A1200's IDE port when adding extra devices" - John Kennedy - Amiga Format - July 1997

The Top-Rated Eyetech *CDPlus* for the A1200

- 8- or 12/16- speed external CDROM unit in quality, CE-approved case with heavy duty PSU
- Leaves trapdoor free for accelerators / memory expansion and the PCMCIA slot free for digitisers, modems, samplers etc
- Option to add additional HD's, CDRoms, SyQuests, *IDE Zips*, Jazs, SyJets, ATAPI tape streamers etc powered from the CDPlus unit
- Comes with special Eyetech *'060-compatible* Mk2 4-device EIDE buffered interface board - easily fitted in minutes with no cutting/drilling (Note that IDE CDROMS *must never* be directly connected to the A1200 without a buffered interface - ask any qualified electronics engineer!)
- Gold plated audio phono sockets at rear (CD+ only) and front panel headphone socket and volume control



The CDPlus and SyQuest EZ135 drives. The IDE Zip Drive is the same size as the EZ135

Amazing Value 8-speed - *only* **£149.95**

NEW! 12/16-Speed - 2.4MB/s (max) -*only* **£179.95**

What do the reviewers say?

Amiga User International - *97%*

"... It all worked faultlessly ... "

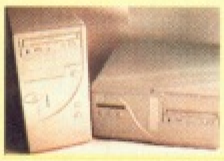
Amiga Format - *96%*

"... An absolutely superb bit of kit.."

Amiga Shopper - *90%*

"... This is a quality product..."

Considering a PowerStation?



The CDPlus is now available with a, 230W, CE-approved, PC MiniTower* or Desktop* case (which can also power your A1200) - *for only £20 extra*

(*as an alternative to the regular CDPlus case)

The Amazing Iomega *IDE* Zip Drive

Another first from Eyetech

- *Can be used in place of - or as well as* - the internal hard drive*
- *Use a different bootable cartridge for each application or family member*
- *Ideal for transferring multimedia data between Amigas and/or other platforms*
- ***Fits in any Amiga/desktop/minitower floppy drive bay or in external case***

CARTRIDGE CHANGES AUTOMATICALLY RECOGNISED!



The IDE Zip drive fitted in an A1200

Bare IDE Zip drive *(inc Eyetech V2.0 Ziptools)* **- Just £119.95**

100MB Zip cartridges just £14.95/1 or £39.95/3 (*A600/1200 buffered interface needed)

A1200 *InstantDrives* & *TowerDrives*

InstantDrives and *TowerDrives* are *only* available from Eyetech



"The fastest drive I have tested on any platform ...95%" - David Taylor - Amiga Format February 1997

Important Notes!

Thinking of buying a **BIG** drive? Dont waste your money on ***ANY DRIVE OVER 4.1GB*** as the Amiga O/S doesn't support it! (2^32-1 bytes actually). Be warned!

3.5" hard drives - even those described as *'Slim'* - are usually 1"/25mm high and ***will not*** fit in an A1200 without significant modifications to the case and metal shielding - which itself reduces the value of your computer.

- InstantDrives require no hole drilling, case clipping, or shield removal required and come Inclusive of full fitting kit and easy-to-follow pictorial instructions
- All drives come ready-to-use with WB3.0 preinstalled & WB2.x install script.
- All drives over 350MB also come with over 45 top quality utilities (not shovelware) ***and*** MMe multimedia authoring software preinstalled, configured and ready-to-run.

InstantDrives:		2.56GB AV(~3MB/s)	£229.95
TowerDrives:		1.7GB	£159.95
2.11GB	£189.95	3.2GB	£199.95
4GB - Take your Amiga *to the limit!* - for just			£279.95

2.5" InstantDrives for the A600, A1200, SX32 & SX32 Pro

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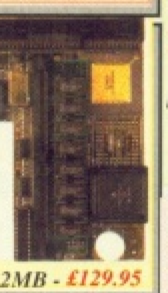
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Amiga: the next Generation



Now that Gateway 2000 have thrown the Amiga a crucial lifeline, what needs to be done in order to ensure it once again becomes a true force to be reckoned with?

The possibility of a new Amiga is a very realistic one. After years in the wilderness, Gateway 2000 are currently in possession of the machine and its intellectual property rights, and several companies are presently licensing the operating system and assembling their own Amigas.

If there is a new machine, what should it be like? The home computer of the 80s and 90s has all but gone, swept away on the tide of powerful game consoles and the brutally effective WinTel PC force. Even Apple has succumbed to the rise of Windows, so what will make the Amiga likely to succeed?

The biggest problem is that many things which made the Amiga a great computer are now hampering it. The hardware was amazing, but it's now lagging behind the PC. Similarly, the operating system is fast and efficient, but it lacks features which are now basic necessities. The danger is that change means that backward compatibility becomes a problem, and starting again means that the essential 'Amiga factor' could be lost.

Essential features

In addition to the list of 20 ways to save the Amiga, we've put our heads together and canvassed some opinions from around the Amiga scene to come up with what we think are the five most important aspects the a next generation Amiga should focus. We've also given each area a five star rating according to its importance to the Amiga's future success. If these points are addressed, there's no reason why the Amiga shouldn't repeat the mass market success it enjoyed just a few years ago.

Good things

The Amiga has certain features which made it unique when it was launched, and still set it apart today. These are the features which makes a computer an Amiga, and they deserve to be kept on in next generation machines.

Efficiency

The hugely popular Amiga A500 had a large proportion of its operating system in a 512K ROM, and loaded the rest from a single floppy disk. With only another 512K of RAM it could multitask dozens of utilities and applications, and run circles around any 286/386 PC. Even an A1200's OS is tiny in comparison to something like Windows95, and still succeeds in out-perform it in several ways.

This efficiency with code and resources made it a perfect home computer. It also means that the core of the Amiga is perfect for embedded systems, such as set-top boxes or even hand held computers. A WindowsCE palmtop machine has a ROM which is 8Mb in size!

"I'm not altogether sure this is a good idea, but my feeling is that the Amiga isn't going to be a first-choice machine for most new users and so it ought to make a better job of being a cheaper second/alternative system..." Jack Schofield, technology reporter for The Guardian



"You can get a P133 plus monitor for £700 including VAT from my local shop... It's a bit hard to see why anybody would want to buy an Amiga to run Windows 95!" Jim Hawkins, programmer of CDTV title Music Maker.

Multimedia

Importance: ★★★★

The Amiga was the original multimedia computer, and its criminal that it has been allowed to lose this distinction. While other platforms struggled to display graphics, the Amiga was running interactive programs with animations and sampled sound. Its multitasking operating system made it idea for handling multiple events, and with CDXL it was one of the first platforms to spool video and sound from CDROM.

The next big thing could well be DVD - Digital Versatile/Video Disc. It looks like ordinary CDROM technology, but has a greatly increased storage capacity. More than enough to stored feature films encoded using MPEG compression.

A computer system based on a DVD player could become the ultimate in set-top boxes: as a video recorder and interactive terminal all in one. Watch films, use home shopping channels and use a video telephone all with one box.

With MPEG encoding and decoding on board, it would also be the perfect tool for home video enthusiasts: play your video tapes into the Amiga and they are recorded onto disk. Edit the sequences, add titles and effects, and then replay the final thing right on your TV set.

The Amiga is an ideal computer for multimedia displays, and with cheap, reliable hardware it is ideal for stand-alone terminals. Remember there is a long history of products such as SCALA, CanDo and AmigaVision behind the Amiga, so get the big names like Macromedia to port Director to the Amiga.

20 Ways to save Amiga

1 Forget the distinction between Chip and Fast memory. It's too limiting, and other platforms manage to do without it. A move to graphics cards or at least PC chipset cards means there is no need for it.

2 Update the Workbench to cope properly with 256 and more colours. A 24-bit Workbench sounds frivolous when we're all used to 16 (or less) colours, but with a large display area it really makes a difference to icons and any programs which open their window on the main Workbench.

3 Build a version of the New Amiga on a card which can be inserted into a PC. Too many people need or want Windows and applications such as Word or Excel. Emulation is an expensive business when the original hardware is so cheap.

4 Build Java support into the operating system. A fast Java Virtual Machine could be reason alone to buy one.

5 Use PC style SIMMs by default in all models. Support EDO and other similar new memory types.

6 Let Workbench icons have a transparent colour, and also allow them multiple images to make desktop animations possible.

7 AmigaGuide was a great idea, but update it so that it works with HTML instead. In fact, as the New Amiga will have a browser as standard and help files - including the new on-line manuals which will be included with the operating system - all documentation can be in the form of local Web pages.

8 As well as Retargettable Graphics (which don't mind the hardware they run on), build Retargettable Sound into the operating system as well.

9 Include voice recognition as standard. Good "discrete speech" systems (which require a pause between each word) are available now for PCs, and continuous speech is coming by the end of the year. Make use of it.

10 Team up with PSION and make a pocket computer which runs the Amiga Operating System.

11 Create a really good suite of development tools. Without development tools, there will be no new software. This should be a priority.

12 Drop any idea of the AAA or special Amiga chipsets. The PC is already way ahead, with fast 2D and amazing 3D effects. Make use of this hardware instead of developing new chips that will inevitably be beaten by the next PC card.

13 Don't worry about backwards compatibility. Start again from scratch: there are always those programmers who will develop emulators - look at UAE, running under Windows95 if you want proof. They said it couldn't be done, but it now runs as fast as an A1200 on a Pentium computer.

14 Support the new USB (universal serial bus) and make use of peripherals such as digital cameras, sound systems, and fast printers.

15 MMU support. Use the hardware to help prevent memory mangling and resource hanging by rogue tasks. One crashed program shouldn't have to take down the entire system.

16 Get up-to-date drivers for the latest printers, scanners etc.

17 Update ALL the Intuition graphics - preferably allow users to configure these to their personal preference.

18 Add virtual memory support to the operating system.

19 Include PCI bus support (hardware and software) to allow use of cheaper PC/Apple cards.

20 Break free of the need to use a domestic TV as a display, and allow the Amiga to use standard computer monitors. This will allow higher resolutions, more suited to DTP and graphics applications.

If all the above was achieved you would have a very powerful and useful computer...but would it be an AMIGA.

Networking

Importance: ★★★★

Networking became extremely important with the advent of Windows3.11, and now with the growth of the Internet it's vital. In fact, the Internet factor is so important that it is shaping the very form of the computers of the future – both in terms of the hardware and of the software.

However, even relatively simple "peer to peer" networking has been sadly lacking on the Amiga. The ability to connect computers together and share information and resources (such as printers and hard drives) makes it an essential characteristic of a successful office computer. Plus it also makes it possible to engage in networking games, where two, four or even up to sixteen players can take part in head to head competitions.



▼ A version of AmigaOS that runs on a Psion Palmtop? A neat idea that's for sure!

▶ It's not all doom and gloom as far as the Amiga's technology goes. Far from it in fact. A next generation Amiga must make the best of the machine's existing strengths.

Good things

Multiple screens

The Amiga allows different programs to each open a screen display, and each display can select the most suitable video mode. Screens can be flipped backwards and forwards with a key-press, or dragged up and down. Nothing comes close to this on other computer systems, even those which attempt "virtual desktop" systems.

Video friendly

The fact that a home computer needed to work with a TV because monitors were too expensive meant that the Amiga was always video-friendly. Adding a genlock or video-taping titles for home video work created a dedicated following. It's important to realise the importance of being able to work with other domestic systems.

ARexx

The inter-process communication language was such an amazing idea: making the sum of the applications on the computer greater than individual components, and redefining how macro functions work. Make sure the new operating system has a similar concept.

Autoconfig

The Amiga has always done it, and the PC can just about do it. Autoconfig makes adding new hardware so easy. There are no jumpers to set, IRQs or DMAs to assign. The computer just gets on with it, and even includes a self-diagnostic system at boot up.

DataTypes

Make sure all of the programs use Datatypes for both the saving and the loading of data, so that when new formats come along it's much easier to update them. It's yet another elegant Amiga solution.

IFF

The Interchangeable File Format made sure that the data created in every Amiga program could be shared. The idea is a good one, so keep it – but update it to include support for the new music sequencer files, audio, moving video streams, MPEG and so on.

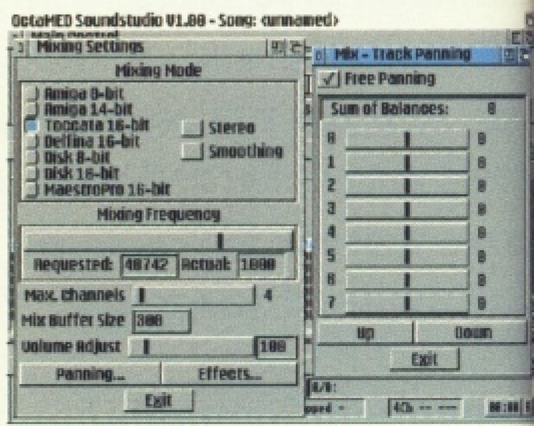


Over the Amiga's history there have been various networking solutions, ranging from the cheap and cheerful Parnet style connections, to plug in cards support from the SANA-II standard and Envoy networking software. However, a simple – and more importantly cheap – plug-in Ethernet card never appeared. Even the A1200's "industry standard" PCMCIA port has been lacking a reliable Ethernet card, whereas Zorro Ethernet cards have seen price tags of hundreds of pounds, compared to the PC market where a cheap card will cost you the same as a game.

The Amiga's file system, the way in which data is stored on disk, also lacks the features required for simultaneous access and security. How?

Firstly, the New Amiga must either have Networking hardware built-in, or available as a cheap option. This is essential to make sharing data between different platforms, as well as providing for state of the art multi-player games.

Secondly, the file system needs to be updated slightly to provide security and sharing features. This would also be a good time to increase the speed of directory listing. The lack of speed in this area is an embarrassment: a PC or Apple can list the files on its disks in seconds, and this means it can also perform extremely fast searches. By contrast, the Amiga moves similar to a dead whale, which makes searches far too



tedious to even try attempting.

Internet

Importance: ★★★★★

Linked with networking, but now an important feature in its own right. A New Amiga must be Internet friendly from the ground up. This means that it must be easy to connect it up to an Internet Service Provider. It must have a built-in Web Browser which is integrated into the Workbench. Think of how Directory Opus mimics the Workbench, whilst enhancing it. The Web Browser should become an even more integrated part of the Workbench.

Electronic mail should be powerful but easy to use, with MIME included but hidden. Images should be displayed inside mail messages, and files allowed to be dragged and dropped. Existing programs already cover this, but they are still fiddley to set-up and use.

Intranets provide a means of creating a "local Internet", which is only available over an office network – it provides a means of sharing information between employees, and simplifying tasks such as accessing large databases or updating stock levels.

It's also vital that Java is available. Java is the C++ like programming language, designed by Sun initially as a way of spicing up World Wide Web pages. Now though,

"..perhaps in a year or two the Amiga will have a powerful enough processor to run (fairly) recent PC business software in emulation mode, and it can then offer a more user-friendly way for enthusiasts to exploit its OS and have 'fun' with its potential. Fun is the key, I think, to the Amigas future – if it is to have one." Dave McIntosh

Java looks like becoming the industry standard language, capable of running – even at low level on specially optimised processors - on a huge variety of hardware.

Make sure the new operating system knows TCP/IP from the moment you switch it on, complete with easy to use controls for setting domain names, IP addresses and so on. TCP/IP is the standard communications protocol used over the Internet, and if a computer can speak it, it can communicate with any other computer connected to the Net.

The physical link can be over the built-in networking hardware (Ethernet or faster), but also over telephone lines. This could be done using a software modem: such a device is already included in some computers, such as the Philips Velo1 handheld PC. A software modem performs all the data processing in software rather than dedicated hardware which means it is cheaper to implement but can also be upgraded as new standards become available.

Provide support for video and sound conferencing, with integral hardware and software support for audio and video compression via MPEG. A video camera such be a cheap option. Include Web server software as standard.

Graphics

Importance: ★★★★★

When the Amiga first appeared on the market, one of its main selling points was its graphics. Up to 4096 colours on screen at once was unheard of – and the ability to move them around with such speed was astounding. Even today, the best Amiga demo programs look amazing. But times change, and things are far from perfect. The New Amiga needs the same leap ahead of the competition as it did in the early days in order to attract interest.

The Amiga's screen resolutions and colour detail is now lagging behind other platforms. Even something as basic as viewing a colour Web page can almost bring even a fast Amiga to a grinding halt, and now the focus is on fast 3D graphics.

Talk of the AAA chipset and similar is a waste of time: even if this evolution of the existing chipset appeared tomorrow, it would still be trounced by the competition. This isn't the place for more "What Commodore did wrong" stuff, but graphics have moved way beyond AGA/AAA.

PC graphics are undergoing their own revolution with dedicated 3D cards providing amazing speed and detail. There is even a standard emerging from Microsoft which means cards from different manufacturers should work with any software. Combine a system built on this with the emerging digital video standards and you will have the ability to capture, edit, replay home videos as well as playing state-of-the-art games and real time video effects.

Sound

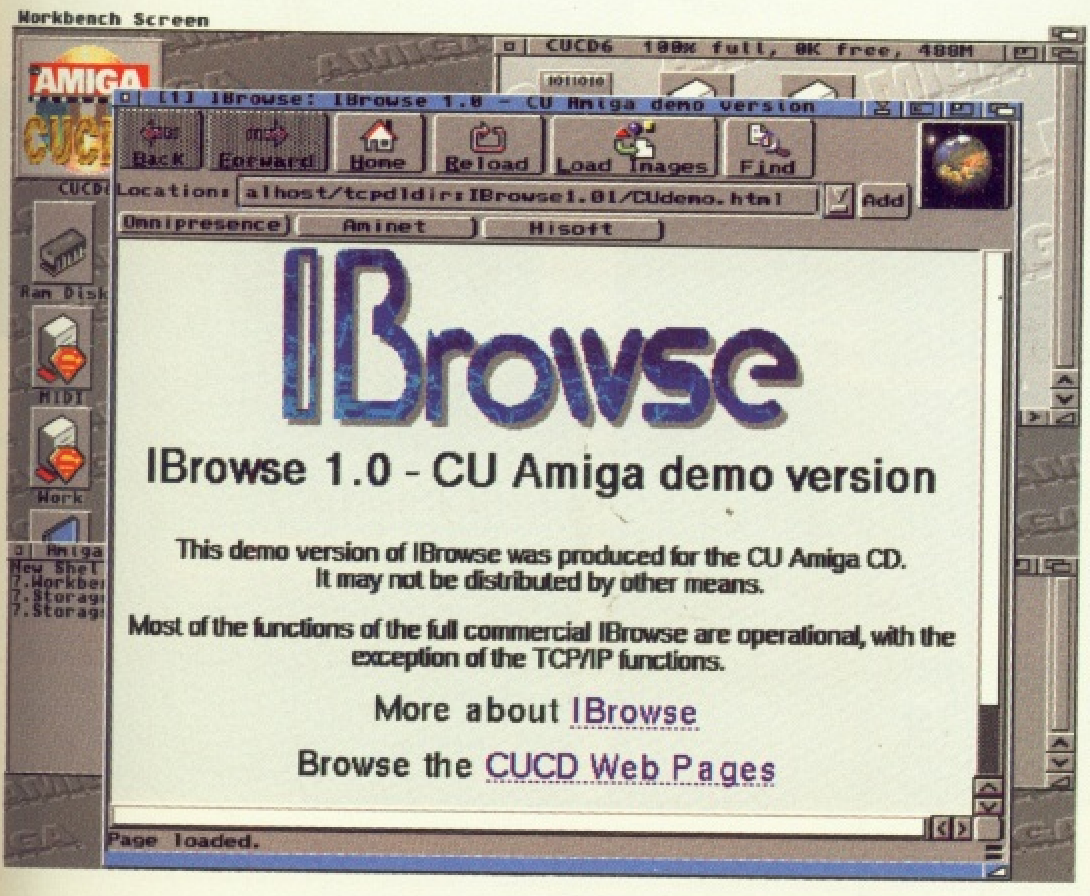
Importance: ★★★★

It's possible that the future of the Amiga lies in niche markets. Find enough niche markets and you have enough sales to call yourself mainstream. One such niche would be the home and small music studio. Computers are now an important part of music creation, acting as sequencers (storing and editing notes), recording (with direct-to-disk digital recording), generation (software based synthesis and sampling) and even pressing (writing information to CD). And of course, games require a healthy soundtrack of explosions and high quality music.

The New Amiga should be a computer with high quality sound generation as standard, audio in and out capabilities and of course a brace of MIDI interfaces. It must be possible to upgrade sound features in the future: look at today's Amigas, stuck with once-cool 8bit audio. The Operating System should make the most of the sound hardware, and an all-singing, all-dancing music sequencing package, feature real-time effects and direct-to-disk recording, should be available as an option. ■

John Kennedy

"The biggest problem with an Amiga console, is the name. The Amiga just isn't fashionable any more, just look at Sega. One minute they're the King, then Sony comes along with the Playstation. All the 'trendy' magazine's (and Digitiser) tell everybody it's cp, and the people go along with it. "** Steven Croucher, ICPUG member and Amiga fanatic





▼ Retaining video output but adding SVGA monitor compatibility is essential.

We'd like to thank...

CU Amiga would like to thank the following for their participation in this feature: Toby Simpson, Jim Hawkins, Steven Croucher, Dave Mcintosh, Conrad Durlston-Powell, Richard Harrison, Richard Smedley, Matthew Soar, Paul Nolan, Mike Nelson, Christopher Gilliard, Ray and others.

Many thanks to these fine fellows, whose ideas and opinions have been used, abused and coerced into this article. All the views expressed here are not necessarily those of all the participants. Thanks once again, chaps. Virtual beers all round.

TURBOPRINT 5

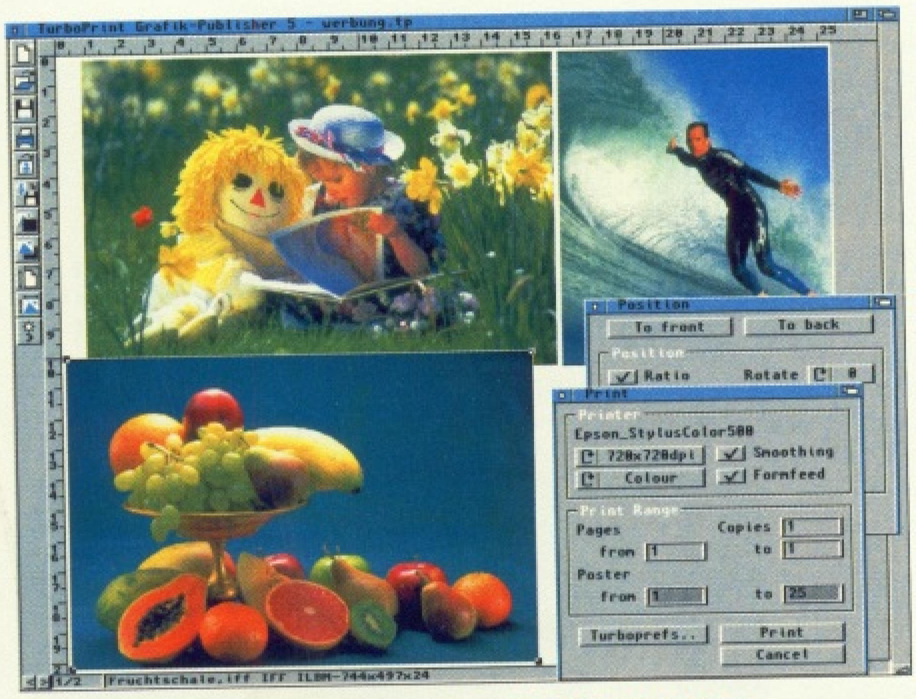
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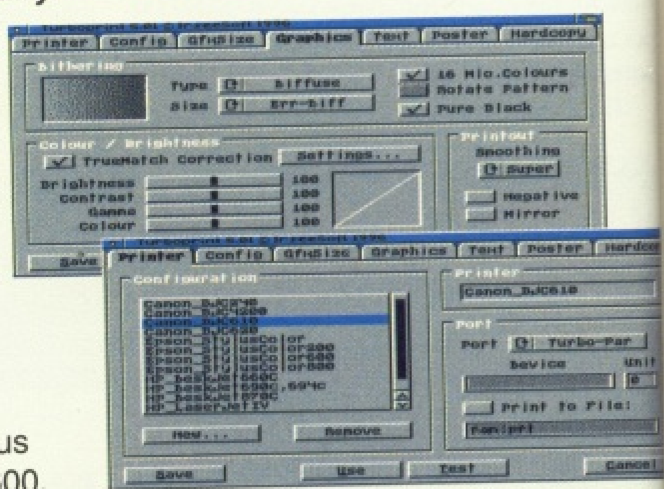
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Screen Scene



Sometimes I wonder what I ate. I mean the Amiga games scene died off years ago right? All These new games can't be real. I blame last night's Ice cream and pickle combo.



Sixth Sense Investigations 40

Previews


Sword 40

Reviews



On Escapee 41

Tips & Guides



Nemac IV 43



Flying High 44

Sixth Sense Investigations

■ DFR: Summer ■ Developer: Cinetech ■ Distributor: Islona © 01773 836781



Here's a thing that seems to have died out somewhat in recent times – a graphic adventure! Yes, while you lot have been swanning around with your first person perspectives and your realistic light sourcing, some people out there have been working on that age old tradition of gameplay. Sixth Sense is a tribute to the LucasArts adventure games of old, that had us eternally trying to figure out puzzles a bit more complex than which key goes into which door.

In a nutshell the story tells of a, and I quote, "crazy young guy who has the ability to communicate with the spirit of a sarcastic man". This crazy young guy also has a friend who believes himself to be a private detective, albeit not a particularly good one, who likes to use the psychic abilities of the original crazy young guy to help him with his cases. However, he has no real control over the actions of his insane friend, who in turn has no real control over the actions of his psychic counterpart, and the end result is comedic chaos – we hope!



▼ Huge cheese and walking killer toys. All in a days work?

Like most other graphic adventures, the game is controlled via a small collection of verbs at the bottom of the screen, and a large collection of objects to use them with. The game will intelligently combine these in a logical way to hopefully get around the limitations of a twelve word vocabulary. As you can see from the screenshots, this is a good looking game but what these shots don't show you is the fluidity and speed of the game. While the LucasArts titles are always well presented, it has to be said that their PC C++ origins are a little apparent.

Sixth Sense Investigations has been written specifically for the Amiga, and as a result runs at a silky 50 frames per second. Add to that; a full voice track, animated intros and cut-scenes, three different worlds to explore – plus AGA cartoon graphics, and you might just have a hit on your hands. As Shaw Taylor used to say, keep 'em peeled. ■

Tony Dillon

Sword

■ DFR: September ■ Developer: Serio Comic ■ Distributor: Blittersoft © 01908 261466

It's safe to say that Amiga owners haven't had it this good – as far as games are concered, for some time. After a deluge, dare I say a glut, of Doom clones – some superior and some rather inferior, it looks like games developers are going back to the kind of things that Amiga's do best. Fast and playable action games that use every trick the hardware has to offer. Take Sword for example, a platform game to rival all others if our preview demo is anything to go by.

▼ He may be cute, but that's no reason to mess with him.





It has all the qualities that have made all the truly great run-and-jump titles the rip-roaring successes that they are. It's fast, smooth and packed full of action, Serio Comic, the developers, claim they want to give the Amiga a real future, and with this title, it seems that claim is more than just good intentions. First impressions? It's a smooth, cute platformer along the lines of the old classics Rick Dangerous, James Pond and a million others. You have eight massive eight-way scrolling levels to work your way round, collecting the gems, sweets and bonuses that abound – until you have collected enough to enable you to open the gate to the next level.

Along the way there are numerous bad guys blocking your path, ranging from rapid firing tree stumps to knights on horseback. Naturally, bits of the ceiling cave in periodically, floors fall away and things fire out of walls and buttresses at you. You'll need to avoid or destroy them with your machine gun – which has a tendency to quickly overheat. Well, you did want a challenge?!



OK, so it might not sound like the most original game ever released, but if it ends up being as much fun as our initial preview version suggests, does originality matter that much? There are two versions of the game planned for September; an ECS, and an AGA CD-ROM version with extra animation on the sprites. It also features fully animated backdrops and rendered animation scenes between each level with recorded voice soundtracks. Sound like your cup of tea? You'll have to wait a little longer, so keep practising ducking under those falling spikes. See full review in next issue of CU Amiga. ■

Tony Dillon

On Escapee

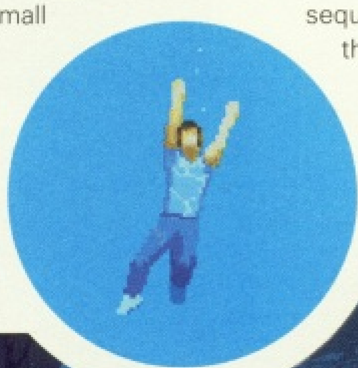
■ DFR: Autumn ■ Developer: Invictus Software ■ Publisher: TBA



Back before the days of motion capture, Delphine revolutionised the platform game world with a technique called Rotoscoping, which involves filming a person acting out a movement, and then digitally painting over the scanned frames to create fluid, realistic movement. As a result Flashback has always been heralded as having the best character movement seen in a 2D game. The only problem being the character was a little small and indistinct – facial features were noticeably missing for example, but then what else can you do with such low resolution graphics?

That all looks set to change however, as Invictus Software unveil one of the most animation intensive action games ever. It features no less than 600 hand drawn frames of animation for the main character, allowing him to perform over 50 different moves – while being twice the size of the main character in Flashback! Sit and stare in amazement as your hero runs, crawls, leaps and swims in glorious AGA colour.

Take a look at the screen shots here – they are from the game itself, not the intro sequence! As well as all this animation, the game features a whole host of graphic tricks to make the entire experience look even better. For example, rain falls in certain sections onto reflective puddles, whilst beams of light cut through each other and reflect through the surface of the ocean. You have to admit, it sure sounds impressive. I guess this gives the boys at Invictus a perfectly valid reasons for the game's lateness in being completed!







▼ The sprites are huge and the graphics stunning. Looks good to me!

On Escapee claims to be a logical successor to Another World and Flashback. As such it features you in a typical Man-Alone-Against-The-World hero type – in a side-on, flip screen graphic adventure where you race from pillar to post, collecting items to help you along the way, whilst doing your best not to get killed. The playing area looks like it's going to be enormous, which it'll have to be as there isn't all that much room for the player to move on screen!

This game was due to be an Amiga only release, until some PC owning friends of Invictus caught sight of it. Once they'd witnessed; the stunning character animation, the many enemy characters (each with their own intelligence), the digitised audio soundtrack, the full screen cut-scene animations and the wide and varied levels, they wanted some for themselves. Well, it's about time Amiga owners made PC goons jealous! ■

Tony Dillon

H-Bomber

■ DFR: September ■ Developer: Aurora Works



▲ Scream at your friends and punch your enemies with frustration

Bomberman has to be one of the most addictive and exciting multi-player games ever released. It's strange that in these days of parents and the moral majority complaining of violence in computer games, a game that involves nothing more than cornering your opponent then laying a bomb under them should become a classic.

Like all classic games, the idea is such a simple one that it grabs you immediately, and the game itself is so playable you can stick with it for months. This is something that US based Aurora Works are obviously aware of, as they have spent recent months putting together a Nineties version of the game. Unlike other Bomberman influenced titles, H-Bomber looks like it's going to bring something new to the party, and we don't just mean the superb Eric Schwartz artwork.



Instead of the little guys in space suits running around a grid format that we've all come to know and love, H-Bomb places you on a barren rocky landscape inside a high-powered hovercraft armed with – yes you guessed it, high powered explosives. The idea, as before, is to lay bombs in front of your opponent's craft which explode just as they come into range. However, this time you have the freedom to lay the bombs wherever you wish, making the whole thing just a little more treacherous than before!

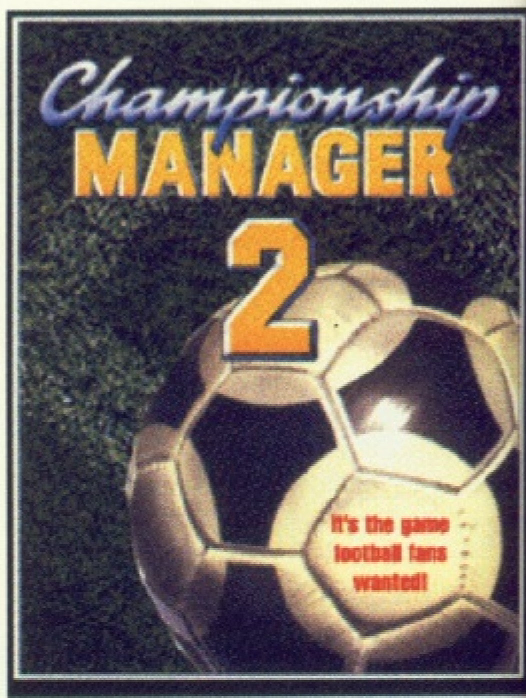
The game will feature up to four player action, with each player adopting one of the four available characters. Instead of all men starting equal, as with the original game, each of the hovercrafts have their own strengths and weaknesses, and it's up to the skills and tactics of the individual players to survive in one of the most dangerous arena's since the Birmingham Exhibition Hall hosted International Gladiators.

With players competing locally or over a network, Aurora Works are sure it will generate the same sort of shouting, family arguments, and general use of explicit language that Bomberman managed to do so well. We can't wait to find out. ■

Tony Dillon

Championship Manager 2

■ Released: Imminent ■ Publisher: Eidos ✆ 0181 636 3000



▶ They said it'd never happen, then it would, then it wouldn't, and so on... Apparently it has now... or has it?

It has been promised on a regular basis for aeons now, but at long last it's here. ChampMan2 was a massive hit on the PC, and still figures in the PC games charts. The Amiga version is likely to hit the top spot for Amiga sales, but you can't help feeling that Eidos would have done a lot better for it if they'd released this a year ago.

Players of the original ChampMan will know what to expect. The primary changes here are much more detailed player information, with major improvements in the range of foreign players and better search facilities.

Apparently there is little lost from the PC version. The only notable absence are the lack of the Scottish leagues and international competitions. Your players still get caps from call ups in the style of ChampMan 1, but you won't get to see the results of World Cup matches as on the PC, nor can you win the international job. Other than that, we are assured the look, feel and playability of the PC version are all there.

Given that the PC version required CD-ROM, 8Mb Ram and a Pentium processor, it's pretty impressive that they've managed to get the game to work on 2Mb Amigas.





However, it seems that Eidos don't really know about modern spec machines, as they've had to excise the OS to make it fit on a 2Mb machine. I fear they will alienate more purchasers by making it non hard drive installable than they would by making it require 4Mb – we just hope someone comes up with a patch before too long. When asked about CD-ROM versions they thought CD-ROMs weren't common on Amigas.

Next month we'll be reporting on what's good and bad about this conversion of the best football management game going. ■

Andrew Korn

Forgotten Forever

■ Released: Autumn ■ Developer: Charm Design ✆ http://www.klte.hu/~zavacki/

Looking at the screen shots, you would be forgiven to think that Forgotten Forever was another Command and Conquer clone. According to the authors, this is actually a Dune 2 clone, and work started on it before C&C was released. Whatever the paternity of this game, the thing that's made it such an attention grabber is that when you look at the screen shots you get the impression this is something really special.





Forgotten Forever is one of the current, hugely popular real-time strategy genre. It will retarg to CybergraphX or Workbench screens and retains full OS legality, which means it should run well on all sorts of configurations. Charm design specify an A1200 with 4Mb and a hard drive as the minimum requirement, but recommend an 030/50.

It will have very large terrain sizes, fully 16 times as large as the terrains in Dune 2, and boasts 4 different terrain types. There will be around 50 types of assorted air, sea and land vehicles to choose from, and around 30 building types. All will contain animation, with plenty of digitally sampled speech to go with it. The game will be mission based, with around 60 missions to start you off and more to come as expansion packs, and multi player options will be available through null modem and possibly internet support.

So, what you want to know is when will you be able to get your hands on it?

◀ Wargaming action Command & Conquer style. Can C&C compete against it?



Development is reaching a pretty much advanced state, but Charm design doesn't want to rush into signing for a developer. Barely a week goes by without a software company moaning that Charm design takes years to answer their E-mail. If Charm design can make Forgotten Forever look half as good as On Escapee, which is written by their friends in the Invictus Team, this could be a real winner. ■

Andrew Korn

Nemac IV



▲ Shooting the yellow barrels (bottom) – causes a chain explosion (top).

■ Price: £27.95 ■ Publisher: Sadness Software © 01263 722169

Are Zentek out to make a fast buck, or is this the version of Nemac IV the public were meant to see? Tony Dillon does a poor Barry Norman... No, he does.

Do you really want me to insult your intelligence by mentioning the kind of game this is? You can easily tell from the screenshots, so from here onwards, I refuse to state the obvious.

Which leaves me with a problem, actually. Once you take the obvious and predictable out of this game, there really isn't much to say. Originality certainly isn't the name of the game, but then if it's a good game, then that really shouldn't matter should it? And in all honesty, Nemac IV is actually rather good. A lot more thought has gone into the plot than usual, telling the age old story of government supercomputer gone haywire, trying to blow up the world, and (cue voice like liquid gravel) only one man with the right stuff.

Mr Sheen

The presentation of the game is superb, and the lads at Zentek have obviously spent a hell of a lot of time and effort getting this game looking as good as possible. From the polished, though predictable, intro sequence to the glorious rendered segue animations, the CD has been used to the maximum, which is how it has earned the title of The Director's Cut. (The original release version was on floppy disk, if you don't remember!)

For a change, though, the quality doesn't drop to mediocrity once you actually enter the game. High resolution texture maps cover every available surface, and it's nice to see that the maps feature more subtlety than the traditional stick everything at right angles, that most Doom clones seem to favour. There is a reasonable amount of variety between levels, though perhaps not as much actually in the levels as there could be. The lack of light sourcing places it a little behind something like Trapped 2, but the speed of the 3D engine makes up for it.



◀ The large 'B' displayed next to the door here means you'll need a key.



Slippy Slide

There's one main thing that fascinates me about Nemac IV. It isn't the plot. It isn't the rendered animations. It isn't even the fact that, as a Doom clone, it has managed to make the basic gameplay even simpler than the original. The thing I like best, and the thing that I'm watching as I write this is the inertia generated by guns and explosions. Knock out a barrel by shooting it, and watch everything in range that isn't actually nailed to the floor get knocked for miles, and that includes the robotic carcasses of your recently slain enemy. Stranger still, you also get knocked around after death, and it's quite fun to watch your virtual persona being sent slowly across the floor by a barrage of plasma shots from an enemy that wants to ensure that you're truly and honestly dead.

The question is of course, how does it play? Well it's simpler than Doom. There's no weapons to pick up – only ammo for the grenade launcher, plasma cannon and chain gun you start the game with. There are no keys to collect, only codes found in computer screens dotted around the maps.

The levels are well designed mazes, with plenty to keep you occupied. The distancing fog used can make it a little hard to make out what's actually going on ahead of you, and there's times when it's easier to see what you're doing by switching off the ceiling and floor texture maps, but those with accelerated machines and hi-res displays shouldn't have too much of a problem.

As for game design, it's run of the mill. As a game though, it's a well polished shoot-em-up, with a competent 3D engine and enough to keep you playing for ages. ■

Tony Dillon

Simply superior

The map feature of the game is by far one of the best I have ever come across. Overlaying the main game screen as simple vector graphics – in order not to disturb the flow of the game, this self-building map shows not only the walls and doors, but also any bonuses for you to pick up. Plus it pinpoints the location of any bad guys – or at least the position they were in the last time you saw them. It may not be enough to save your life, but it will certainly make it slightly easier to remember where you left that stash of chain gun magazine.

NEMAC IV - THE DIRECTORS CUT

■ Workbench version	2.0	Graphics	86%
■ Number of disks	CD	Sound	80%
■ RAM	2Mb	Lastability	85%
■ Hard disk installable	Yes	Playability	86%

OVERALL

Not particularly original, but playable and polished.

85%

Flying High



■ Price: £29.99 ■ Publisher: Islona ✆ 0500 131 486

As we move further and further into texture mapped 3D territory, it could never be too long before someone came up with a racing title. And here it is.

We previewed this one last month, and we claimed that it looked good. We're reviewing it this month, and we are still going to claim it looks good. I'm more than happy to sit here and tell you how good it looks but unfortunately, like so many games that have come before it, looking good and actually 'being' good are two things that seem to be mutually exclusive. Delve with me into the world of Flying High.



▲ The best looking racer since XTR, Flying High cuts a few corners to deliver fairly fast screen updates. No, that's not the end of the road, it's the horizon.

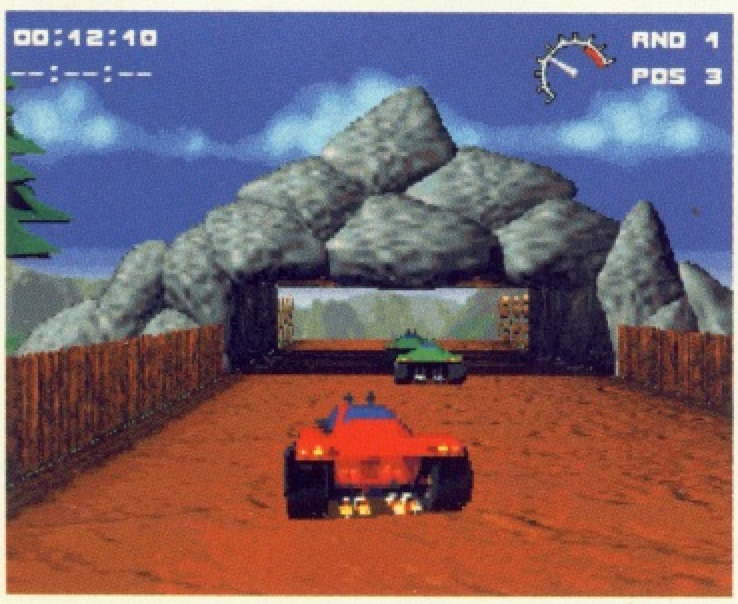
History Lesson

Many moons ago, and I'm sure some of you will remember this, there was a game called Out Run. It broke the mould of racing titles in the arcades by creating a new kind of realistic 3D effect that moved away from the simplicity of Pole Position by building the track out of horizontal strips, layered in parallax and then scrolled 'toward' the screen. The end result was an exhilarating turn of speed and – for the first time ever – hills and drops. The parallax could be scrolled in all directions, and those clever bods over at Sega knew exactly how to exploit it.



The technology was 'borrowed' by a thousand other titles (Afterburner, Powerdrift, Enduro Racer to name but three) and possibly most importantly for Amiga owners, by Gremlin's Lotus series. These games were fast, enormously playable and hugely successful. Of course, looking back at them now they are a little dated – flat rectangles for a road and thousands of identical sprites whizzing past to create the impression of a cornfield are somewhat old hat, but it's worth remembering those games for the sake of this review.

▼ Varied tracks and scenery are a far cry from the likes of Leading Lap.

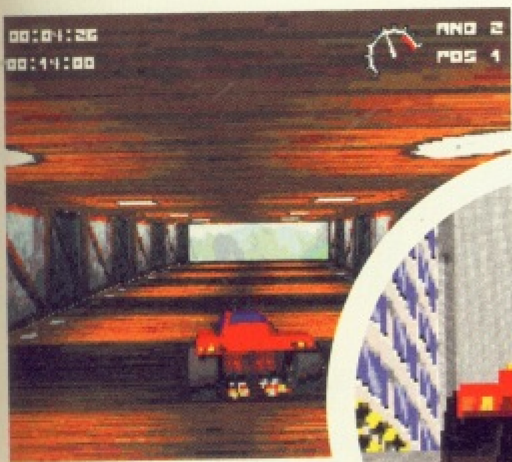


Promising

The title may not indicate so, but Flying High is a racer in much the same vein as the few I've rambled on about in the preceding paragraphs. In a nutshell, you race as one of a pack of eight through a variety of locations (city, jungle and so on) to win, well, just for the hell of it really. As you race around the enormous looped tracks there are bonuses for you to pick up, such as money to improve your vehicle for example (see the boxout) or other interesting items which update your car on the spot such as turbo boosts, for that little extra kick. Of course, there has to be some balance in life, and if someone is going to be good enough to leave nice things lying around for you, then it goes without saying that someone has to leave something a little less pleasant in your way. Traffic cones are bad news in this game – touch one and you'll go flying across the track to smash into the barriers on the other side. Same with oil cans and other cars. Best avoided really. So that's the run down of the game.



What's it actually like? – I can hear you crying. Well, we'll start with the good stuff. The game looks great, although the still shots probably don't do it that much justice. It all works on the same principle of parallax layers that founded Lotus, but this time everything is texture mapped – the road looks particularly impressive for example, and as everything is sprite based rather than polygon rendered, it belts along at a fair old





▲ Tunnels and hills are some of the features that lift the game above its rivals – visually at least.

crack. There are three different resolutions to run in, and naturally the 320x256 is something that only accelerated machines are going to be happy with, but in one of the two lower resolution modes it bangs along quite happily on your basic machine. Even multiplayer mode, where up to four people can play at once, runs at a reasonable frame rate.

At first glance, the 3D effect is a little disconcerting. As you are working with sprite layers, and there is very little distancing, there is no real sense of perspective. Watching the buildings as they fly past is unusual, as they curve to follow the line of the road. Not that this unreal perspective on the world detracts from the game in any way. After all, once everything starts moving at speed you're far too busy watching the road and trying to stay off the barriers to worry about whether the buildings are mathematically correct or not.

The big but

You see, it's the gameplay that really lets this game down. The programmers seem to have come up with a very capable and impressive display engine, and forgotten to spend any time getting the game right.

There are so many flaws in the basic design of the game it's difficult to know where to start. So I'll start with something simple, such as the design of the tracks themselves. Very little thought seems to have gone into the actual line of the track. So much time and effort has been spent on making everything move as quickly as possible, and making the trackside objects as varied as possible that no-one seems to have noticed that the tracks are awful. As I've said, there is no real distancing to speak of, so you would assume this being the case that the last thing you would put in as a track designer would be corners tighter than my school uniform – along with the kind of hills and dips you would normally only see on a roller coaster. Unfortunately that's exactly what the designer has done with the end result being even less distancing than before. You try avoiding a row of traffic cones when the first sight you get of them is about ten feet in front of your car!

All over the shop

And then we have the car handling. Surely the most fundamental thing to get right. You can make the tracks any way you like if the car handles correctly, and you'll have a playable and entertaining game. This game has the worst vehicle dynamics I've seen in a game. Take the steering... for reasons only known to the programmer, they've gone for linear steering, which for those not in the know means that you're constantly steering. If you are steering hard right, then you need to steer left to straighten up, and this can take some time to get from lock to lock. It takes so long, in fact, that you do end up spending most of your time stuck to one side of the track or the other. You can't see the bends coming, due to the lack of distancing, and by the time you do see them, it takes so long to steer into them that you're scraping along the outside barrier before you're anywhere close to actually turning. See where the problem lies?

It's this basic lack of responsiveness in the controls that really destroys what should have been a fantastic game. After all, this kind of game has been done many times on the Amiga, and done very well indeed (although strangely enough, the Amiga conversion of Out Run was an absolute dog!). It takes a lot more than good graphic tricks to make a game, and sadly this game really is nothing more than a good graphic engine with a rudimentary game attached. Hopefully they'll get it right for the sequel. ■

Tony Dillon

The on the road price...?

In Flying High you drive a bizarre futuristic 4-wheel drive buggy through the most mountainous city streets you're ever likely to see, and if you are going to stand any chance of getting ahead of the pack, then you need a few optional extras, available to buy between races. Things start in a more-or-less standard vein – faster tyres, more powerful engines and turbo boost accelerators to get your top speed up to something truly uncontrollable. Then you have what can only be called the 'Dirty Tricks' section. This is where you can get your hands on missiles, rockets and spiked tyres to give yourself the ultimate edge over the competition.



◀ Simulated lighting effects are cleverly used with the road and tunnel texture maps, giving the impression of a more advanced 3D engine.



FLYING HIGH

Workbench version.....AGA	Graphics 88%
Number of disks..........CD	Sound..... 76%
RAM.....4Mb	Lastability..... 63%
HD installable ....Yes	Playability..... 45%

OVERALL

Great looking game, but unfortunately no gameplay

68%

Tips Central



Phew! Things are finally back to normal at CU Towers and I'd like to thank everyone for sending a multitude of tips and cheats in. I can't reply personally to you all, although I'm trying my hardest... So do keep writing!!!

SWOS 96/97

Sensible Software

Fifteen year old Daniel Fox from Stockport is quite possibly the finest Swos dribbler I have ever heard of, try this three for size...

Tip Number 1 Most of my goals come from just outside the 18 yard box. Run towards one of the goal posts head on until just outside the area, shoot hard and low, and apply a lot of after-touch so that the ball goes as close to the opposite corner of the goal as possible. A lot of the time these shots will go in.

Tip Number 2 Using two strikers with lots of speed, do the following at goal kicks. Very often the goalkeeper passes the ball to one of the full backs. With your fast striker, run forwards to collect the ball, turn to face the opposite goal-post and shoot hard with no after-touch. With a little bit of luck the keeper has not had time to recover and the ball sails in to the top corner.

Tip Number 3 This is actually more of a cheat than a tip. When shooting, hold the fire button down and tap "R". The screen will flash and the ball will drop in the net if the shot was on target.

The fire button must be held down from when the shot is taken till after the screen has stopped flashing. Do not attempt to do this if the goalkeeper has already started to dive as this will make the game hang.

You'll find that this is particularly effective at kick off – on the following pitches: Normal, Frozen, Soft, Dry and Hard. All you need to do is simply pull back (or push forward if you are going downfield), then press and hold fire, and tap "R" – just as the ball is bouncing on the penalty spot. By the way all of these tips seem to work the same on all versions of SWOS and Sensi-Soccer.



Gloom

Black Magic/Guildhall Leisure

What an excellent cheat from Allan Ullmann for both versions of Gloom. On the options screen select About Gloom and hold down the Help key and press fire on your joystick. The screen should flash. Start your game, but press a numbered key, i.e. 1-5 awards you all the weapons and repeated pressing gives you full weapons boosts for free! Pressing zero for extra health, whilst pressing the Help key skips all the levels!



Watchtower

CyberArts/OTM

According to Mario from Amington, you can get to the top of Watchtower if you input the following codes when it asks you for a code out of the manual:

Jump to Level	Code
1	14127
2	15364
3	56094
4	85488
5	19491
6	02179
Unlimited Lives	54266
Unlimited Grenades	47773
Unlimited Time	68978

(Remember to enter the correct code from the manual for the copy protection also)

Naught Ones

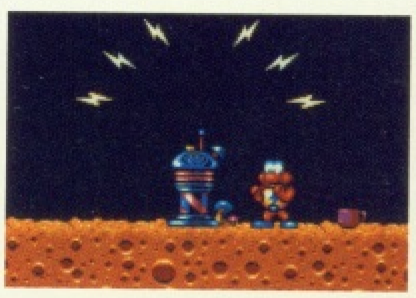
Interactivision

Super duper chap Steve Crooks says that if you type Joshua on the title screen, salvation shall be yours and you shall be rewarded with infinite lives! Cheers Steve!

James Pond 3

Millennium

And yet more codes for the James Pond games... by typing in NIGHTMARE at any time during the game and pressing F10, you can enter a cheat screen. Pressing escape will return you to the main game.



Crystal Dragon

Magnetic Fields

Aaron and Liam of Scarborough give us a cheat I never knew existed. On the character generation screen, instead of selecting any characters simply press 'done straight away' and two characters (Yorath and Bethan) from the story in the game manual appear. Both are strong, clever, intelligent and start at character level 2.

Lemmings 3

DMA Design

Young 13 year-old Kevin has given us the following codes for the Frost levels:

Level	Code
2:	IJRLDNCCCP
3:	NRLDLCCDCM
4:	PLDLCIOECS
5:	LDLCAJVFCM
6:	DLCKJVLGCH
7:	LCCNVLDHCE
8:	CINUNDHICI
9:	CAJSMDLJCO
10:	OKROLJCKCF
11:	NRMENCCLCI
12:	RMDLCKNMCO
13:	MDLCCJWNCI
14:	DNCIJVMOCQ
15:	HCCNTOLPCR
16:	CINVMDLQCE

You need help

If you need help on any game, or you have some tips you'd like to share with your fellow readers, write to Tips Central at the following address, marking your envelope Adventure or Arcade accordingly:
Tips Central, CU Amiga Magazine, 37-39 Millharbour, Isle of Dogs. London E14 9TZ.

Adventure helpline

Simon the Sorcerer

Please can you tell me how I can get into the Golum's cave by the waterfall? He keeps on saying "My Mum always told me not to party with strangers"!

Andrew License, Northumberland.

The first rule in adventure games is to remember, "If you can't get into somewhere, perhaps you're not supposed to". And guess what? Yes, you guessed it. You can't get into the Golum's cave. On the other hand you are supposed to give the Golum a nice jar of Swampling's Stew and he will give you a fishing rod in return. See, life isn't as bad as you thought. On the other hand, the only way you can collect a specimen jar full of swampling stew, is to first eat a bowl of the muck yourself.



Simon the Sorcerer (2)

Zak McKracken

I've got the Blue Crystal and the Crystal Shard, but how do I get the crystal out of the statue in Mexico? I think it's to do with the crayon, which I have, but nothing happens. Also, what do I do in Stonehenge?

Crispen Daysh, Poole.

In Mexico you are supposed to go through the maze to the Map Room where you pick up the yellow crystal shard. After that you must use the yellow crayon on the strange marking. Then draw the symbol from the huge statue in the Great Chamber on Mars. Also, Leslie is the one who needs to check out the Mars location.

As for Stonehenge, I suppose you could try to get past the battalion of police which are normally guarding the circle against new age travellers who want to dance naked in the moonlight – but you would be in danger of being taken off to the Police Station. That would be "a bad idea" as you might fall down the stairs to the cells – five times! Instead I would recommend that you try using the blue crystal on the altar stone. After you wake up – Yup, it's a dangerous thing to play with altar stones, move the cursor all the way to the right, then quickly hit the button twice to leave before the alien arrives. You can return later to use both crystal shards on the altar stone.

Police Quest 3

I've been driving up and down the highway on Day six and getting nowhere. The only things I know how to do correctly are; put the toilet paper into the toilet, and find the cocaine in Morales' locker. I then inform the Captain and get stuck. Please help?!

Michael Simons, South Shields.

Well they do say that "Sneaks never prosper", so I guess it serves you right for being such a "goody goody" and telling tales to the Captain. On the other hand you have already been a pain in the butt for five days, so I guess you might as well carry on. You should; leave the Captain's office, drive to the Coroner's Office, and find the location from the map in the game manual. Finally, open up the cabinets until the Coroner appears to give you an envelope.





Big Red Adventure

Future Wars

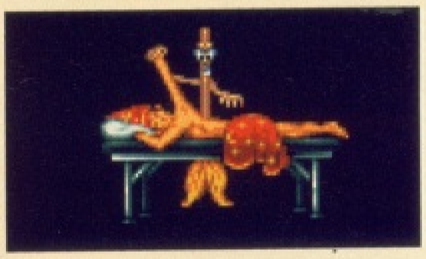
About seven years ago we purchased Delphine's Future Wars, but were never able to get past the section after the Map Room. On entering a coded doorway there is a room of machines where the only thing of use is a photo-copying machine. After trying various things, a man enters the room who then shoots us. As you can imagine this proves extremely annoying.

Unsigned, London

Well, I'm afraid I must side with the owner of the Xerox machine. If you insist on messing around with other people's photocopiers, you must expect to get shot! Of course you have also made the foolish mistake which all players make in thinking that the pretty circle of light on the floor to the right of the machine is only there for decoration. Well, it's not! You must operate the green button, place paper in the opening, operate the red button and take the documents. Now move swiftly to stand in the circle of light to be whisked off through a time portal.

Gobliins II

I cannot get Fingus and Winkle past the sleeping giant. I'm carrying a stone, a bottle, some matches, wine and a sausage. I've now been stuck



there for almost two years!

M. Abernethy, Middlesex.

Well I've got to hand it to you – or else it's obvious that you're never going to get it! The idea at this point is to provide the giant with a breakfast so he will let you pass. Everyone in the world knows, (even the French who created this silly game) that a real breakfast consists of a fried egg and sausage, so it's an egg you are looking for at this point. Look around and sure enough, there stands a chicken. Get Fingus to stand behind the chicken while Winkle picks it up. While Winkle holds it, (the chicken!) Fingus should hit the chicken with a sausage. An egg will pop out which you can collect. Use the sausage to get past the dog. Now use the matches on the sticks to make a fire, and use the egg on the fire to wake up the giant. Of course being a rotten French giant he'll also want your wine and sausages before he lets you pass, but then you would expect that from sneaky foreigner.

Big Red Adventure

I've found a way to have as much money as you want, and be able to visit any location you desire.

First make a note of how much money you have, then create a save game file. Stop the game and boot up a shell. Go to the directory where the game file is stored and edit the file using the command:-
ED filename

You'll find that the third word down is your present location, so change it to a different one. Search down the file until you come across the number which is the same as the amount of money you have. Change this number to however much you want.

Brian Davis, Liverpool

Wouldn't it be fantastic if life had a save game position which I could edit as well!



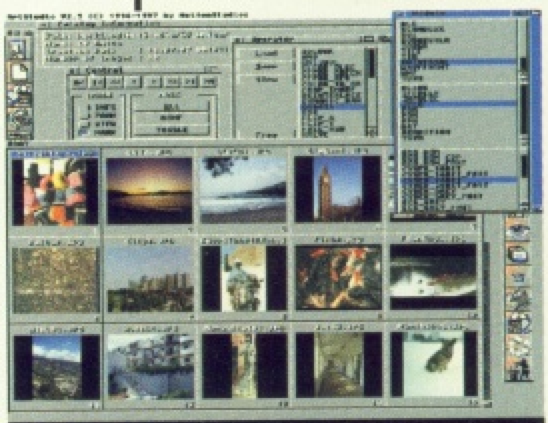
Tech Scene



I don't believe this. More hardware, more software and more of the same excellent regular features. I tell you, we've never had it so good here at CU Amiga.



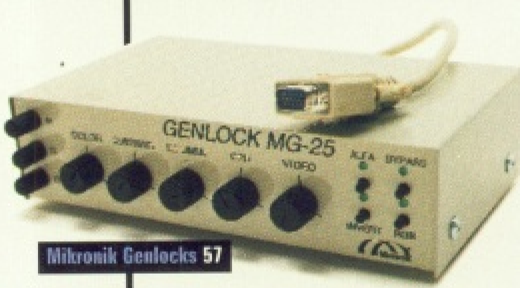
Graphics Tablets 54



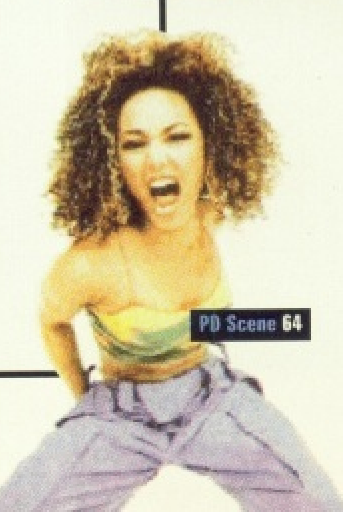
Art Studio 61



Infinitiv A1200 58



Mikronik Genlocks 57



PD Scene 64

Art Effect 2

■ **Price: £119.95**

■ **Supplier: Blittersoft ✆ 01908 261 466 http://blittersoft.wildnet.co.uk**

Art Effect 1 earned CU Amiga's praise and adoration not long ago. Now Haage and Partner have moved to Art Effect 2.0...

The new version of this elite graphics package has a full ARexx interface, multiple undo/redo, some interface reworking, and best of all, the implementation of "layers" – the ability to treat a single picture as multiple images composited over each other, like an animation cel.

The main program revolves around seven major menus and a single compact toolbar. As a bonus, a window large enough for a single line of text lives at the bottom of the screen, and provides popup help for almost any button in Art Effect or its modules by simply leaving the mouse pointer on top of the button for a second or two.

A number of submenu options bring up their own windows, which are also predefined to the first eight function keys. More basic manipulations (flipping the image etc.) are single menubar selections. Everything is very comfortably laid out, and while not every tool is so intuitive you can use it immediately, nothing is so advanced that you can't hit the "Cancel" button if you make a mistake. You can work on multiple projects in multiple windows, memory permitting. CyberGraphX is fully supported as is a special HAM8 mode – avoid unless necessary as HAM8 is a major drain on CPU resources.

Picture conversion

Art Effect ships with basic image format support, most notably for IFF and JPEG. To get a more complete library of image format support, including the ability to save GIFs, you need the additional SuperView module for Art Effect, which runs around UKP30.

However, like most good art programs Art Effect has autodetection of incoming image types, and a simple "save as" brings up a requester of the supported image save formats. If you own the SuperView plugin, you'll have to pick "SuperView" at which point you're presented with a second menu of the SuperView save formats.

The SuperView module for Art Effect 1 still works with Art Effect 2, though you may want to check with your dealer to make sure you have the latest revision of the SuperView plugin. Until I upgraded, Art Effect 2 would crash when it attempted to initialise. The new ARexx interface means that Art Effect is now capable of converting a mass of pic-

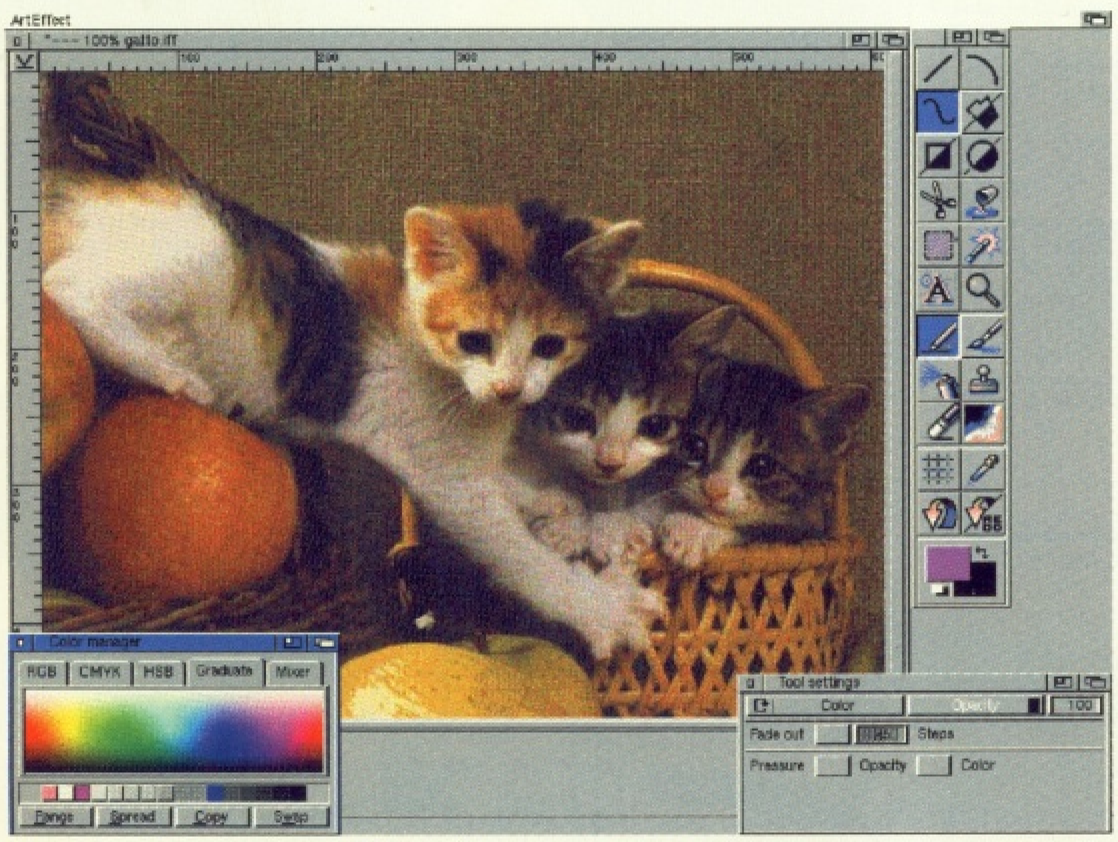


tures formats without additional user intervention. Previously, Art Effect was hamstrung to being practical for only one image at a time. This is relevant if you're preparing a picture library but need to get a group of images in a common format.

Filtering the wheat...

There are cheaper ways to convert images, and the real attraction of any image processor is the effects (called "filters" in Art Effect).

Art Effect's come in many flavours: colour, blur, sharpen, stylise, distortion, pixelate, and "other". These are the general categories for the 30+ filters that ship as standard with AE2. Art Effects' filters all bring up a stand-alone preview window with whatever settings apply to the individual effect. The preview windows let you view the entire picture or a magnified section with the effect



◀ **Art Effect raises the image processing stakes with version 2's new features.**

Bits and bobs

Documentation for Art Effect 2 consists of the Art Effect 1 manual and two AmigaGuide addendums, one for new 2.0 features, the other for the ARexx interface. The printed manual is competent, and the addition is easy to read.

Haage and Partner have a pretty good reputation for support in my book. Art Effect 1 free upgrades were fairly common. The code is now written in their own StormC, so it's easier to know where to point the blame when things are beginning to go wrong. They have a very strong online presence and are one of the key supporters of Phase5's PowerPC initiative, promising PowerPC-aware effects for Art Effect in the future.

applied to it, although I'm disappointed that the preview size is fixed and that the zoom feature locks to the centre of the image.

You can open multiple filter windows at once, which cleverly react to each other in real time – if you apply one effect, the remaining preview windows adjust without intervention. This also applies if you make a change with the pen or brush on an image.

Some filters are less flashy, such as color correction and negative, others purely for showing off, like the Caricature and Curl effects. The PowerEffects 1 plug-in disk is largely made up of effects of the latter type, designed to drastically change an image.

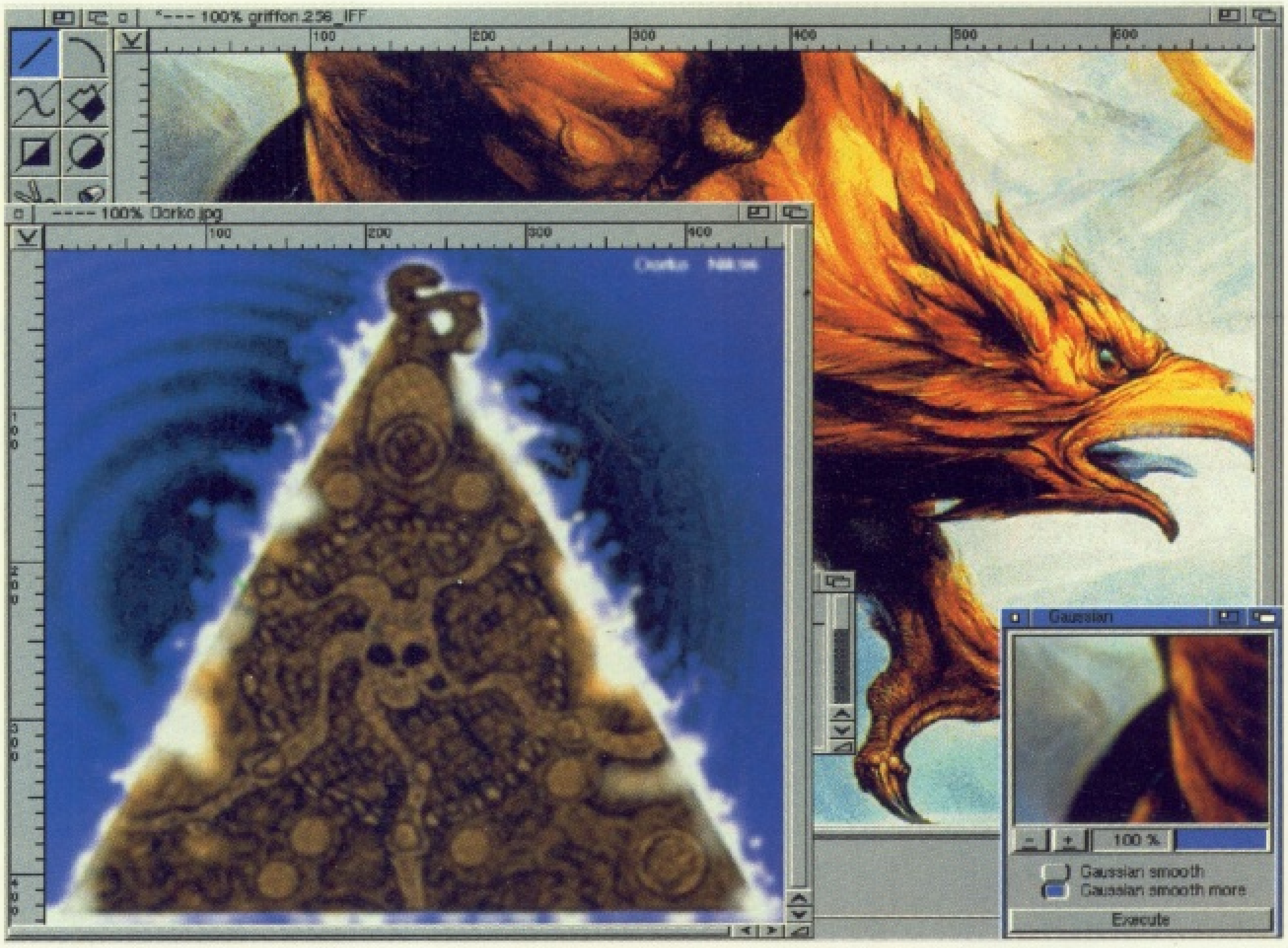
By default, effects are applied to the entire image. By using Art Effect's masking tool you can block in or out regions of the image you wish to limit the effect to – the downside is the regions you select are rectangular. It's OK for a number of tasks, but means Art Effect is ill-equipped for rotoscoping or applying very precise effects. A way to work around this limitation is with layers, although it requires some premeditation.

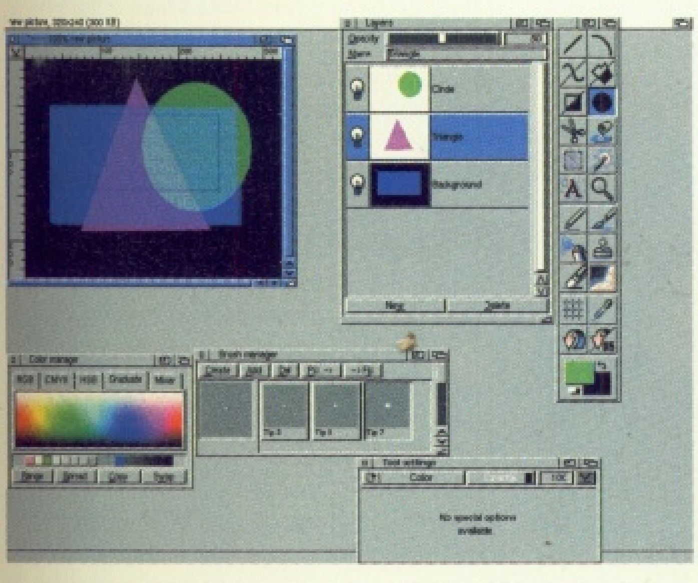
Cutting through layers

Layers are a way of approaching an image that doesn't treat it as a single entity. Rather, it looks at an image as separate images pasted onto each other. This is the cornerstone of Photoshop's operation on the PC and Mac, and is one of the things Amiga image programs have not kept pace with.

Those familiar with Photogenics have a partial understanding of layers. In Photogenics, you define an area using a draw or fill tool an effect can be applied to. This area exists "on top of" your image until you find the effect you want, make all the changes to the area, and stamp it down. That's much like having a background layer (the image you're working on) and an "effect layer". In Art Effect, you've up to three layers. First the background, and two user-definable layers. Using a special menu, you pick which layer to work on and from this point, any changes made to the image will only affect the layer.

The layering menu also lets you select opacity. 100% opacity means the layer with precedence (selected using drag and drop on the layer menu) will completely mask the other where they overlap. Lower values allow for more subtle blending and compositing effects. You can also combine layers at will, freeing up a slot for a new layer once you've got your desired effect. If it all sounds incredibly daunting, don't be discouraged.



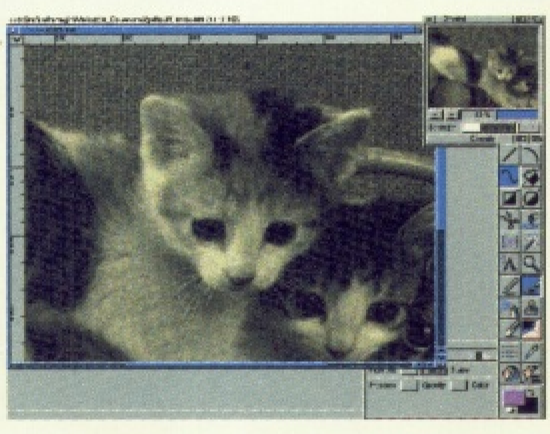


▲ **Multiple layers allow for complex manipulation without headaches.**

The Art Effect 2.0 online manual has a very straightforward and easy to follow tutorial on layers. You can save an image in its layered format for future editing, but only in IFF format. If you choose to save to anything else, you'll have to combine all of the layers into one, which will make it impossible for you to continue your layer work. This is fine if you're finished editing, of course.

Three layers isn't a lot but it's enough to get by, and the logo example shows how it's effective. But, as is often the case, more is always better. Hopefully there will be a limitation not by design but determined solely by memory availability in the future.

Layers going in is a memory hog, to put it politely, and they do cause something of a performance hit as a lot more data is used, meaning you're more than likely to be cutting into the program's built-in virtual memory swapfile. If you've been thinking about getting a new SIMM or 060 card, then now could be just the perfect time.



Stacking up

Art Effect 2 is a worthy successor to AE 1. Ease of use is tops, support of CyberGraphX in all color depths is applaudable, and it's snappy to work with too. Multiple-level undo and ARexx are here, but this hasn't come without a price as Art Effect 2 costs twice as much as AE 1. This prices it at the same level as Nova Design's ImageFX 2.6, which has more powerful effects.

Haage and Partner is rather aggressive in their promotion of Art Effect. They liken it to Photoshop, the expensive, powerful image processing package for the PC and Mac. With Art Effect 2, the program is more deserving, if not of a direct comparison with Photoshop, then certainly with being considered among the ranks of the most impressive image processors for any platform. ■

Jason Compton

ART EFFECT 2
Developer: Haage and Partner

System Requirements: OS 3.0, 020, AGA or CyberGraphX, 6 MB total RAM, hard drive

Ease of use **96%**
It hardly gets any better than this

Performance **92%**
Both capable and powerful. Though not No1 for everything

Value for money **84%**
It's going to be a tough call now between AE and ImageFX

OVERALL
A terrific performer, made excellent by its new features. **91%**

Siamese RTG & A1200 Ethernet

■ Price: TBA ■ Developer: HiQ systems ✆ 01525-210580 http://www.siamese.co.uk

Great new things are on the horizon with HiQ's Siamese RTG system. We take a sneaky look at the new version that will run over Ethernet and an A1200 Ethernet card to go with it.

In the Siamese 2.0 RTG review (July 1997 issue), we looked at the revolutionary software/hardware package that allows using a PC as a superior graphics display for the Amiga. We went on to mention that HiQ were working on a version that would work via the TCP/IP networking standard. Work progresses in this area, and we got a sneak look at the new Siamese RTG software working over Ethernet. Rather than the paltry 12 kilobytes a second afforded by a serial connection, Ethernet promises over 250K/s with the A1200 Ether adaptor and faster still if using a Zorro unit.

A1200 Ethernet card

HiQ is to release a brand new Amiga 1200 Ethernet card developed by Hydra Systems. The £150 unit utilises a standard IBM PCMCIA Ethernet card with an adaptor to modify the A1200's PCMCIA port to work 100% reliably at speed.

A small black BNC 'thin Ethernet' driver box plugs into the A1200 unit to provide the cable connection. For existing owners of the Siamese RTG software, HiQ is going to include a PC PCI Ethernet card, cables, t pieces and terminators for a complete solution at no extra charge. The same applies if buying the £199 Siamese RTG software at the same time.

Hydra Systems are putting the final touches on the new A1200 PCMCIA Ethernet as we went to press. HiQ's bundle will allow displaying of the Amiga screen on a PC, suitably equipped with a high speed graphics board as you'd expect but at unprecedented speeds due to the serial bottle neck having been reduced drastically.



▶ Here's the A1200 Ethernet prototype showing the main interface and the BNC adapter.

20 times serial

Initial tests showed that the A1200 PCMCIA Ethernet adaptor turned over 250K/s, around twenty times the speed of the internal serial port. Ethernet is rated at 10 Megabits per second and so in theory can accomplish around 900k/s but here the A1200's PCMCIA interface slows things down. Not being one to look a gift-horse in the mouth, the difference to the Siamese RTG was astounding. Icons appeared as fast as they did on the A1200 native. Window drawing and general GUIs appeared almost instantly. In many operations it was clearly quicker than even a big box Amiga equipped with the fastest Amiga graphics board, the Picasso IV. The software driver is under the process of being optimised for further speed increases.

It's not just speed that's the issue here, now that Siamese RTG is moving to TCP/IP, the Amiga will run a TCP/IP stack such as Miami to communicate down the Ethernet. It's easily possible to have the A1200 connected to the Internet via the PC with the use of one of the many PC Wingate derivatives. Fancy having the latest Netscape Communicator and AmIRC on the same hi resolution PC screen, both accessing the Internet. It really does work, we did it and it's a wonder to behold.

A more novel use of the new TCP/IP RTG system is that you aren't limited to Ethernet. TCP/IP is the communication protocol used by the Internet so it is possible to RTG one Amiga's complete display over the Internet to a PC anywhere in the world! This isn't fantasy, it actually works. HiQ's lead programmer, Paul Nolan (see his Points of View this month), is also working on being able to send different screens to different machines. CyberGraphX 16-24 bit screen support is also being worked on. Gee, it's exciting stuff.

Next month

Next month, expect a full review of the new Siamese RTG software. TCP/IP is just one of it's improvements we're checking in detail. We'll also be testing the A1200 PCMCIA Ethernet cards performance with the Siamese RTG software – and with Amiga to Amiga networking. So don't miss October's issue of CU Amiga Magazine! ■

Mat Bettinson

Digi Pen Graphics Tablets

AMIGA SUPERSTAR

■ Price: 303 £59.95/606 £89.95 (upgrade £19.95) ■ Distributor: Blittersoft © 01906 261466

It's been a long time since we looked at a graphics tablet. For a machine so graphics oriented, where are they all? Micronik have them, it seems.



▲ The 606 makes a very nice desktop tablet.

Ever since I got my hands on a Koala pad for my old Commodore 64 I it has been very clear to me: if you want to do computer art you simply have to have a graphics tablet. Given the heavy concentration on graphics usage the Amiga has enjoyed, it is bizarre how little inroads graphics tablets have made in the Amiga market. At the top end of the field, there are drivers for the Wacom range of graphics tablets, but alas there is very little support for these excellent touch sensitive pads in software. Non touch sensitive pads can work as mice replacements, and will therefore work with all mouse based software. Two notable entries in this field have been the Genius tablet from Power and the cheap tabby from First. Even these two are hard to get now. Thank god for Micronik.

▼ The 303 is ergonomically designed for comfortable hand held use.



▼ Fluidity is the key – tablets are far more natural drawing tools than mice.



Micronik's new range of mouse replacement tablets are actually the Omnipen range of cheap PC/Mac tablets which Micronik have adapted for Amiga use. We looked at the 606 and the 303, 6 by 6 and 3 by 3 inches respectively. There is an adapter from the 9 pin serial connector on the pad to the 25 pin plug on the Amiga and a little through connector which takes power from your joystick port in the case of the larger 606 board.

Software installation is very easy, all done through a standard workbench installer. The software provided is GTDriver, which will in fact run quite a range of graphics pads and serial mice. All the software prefs are set up for you by the installer.

So now you have your tablet up and running, what next? The tablet replaces all mouse use, pressing the pen down onto the tablet being a left button press. The right button is operated by a small button on the shaft of the pen. The tablets do not interfere with normal mouse control, so you may find it convenient to use your mouse for menu operations. Selecting menus from the pen is not great, and sometimes goes a little wrong.

Smooth...

Both tablets are very smooth to use. The only rival these devices have ever had in terms of price was the Tabby, which was a neat little thing but too clunky for delicate work. In contrast the pen of these glides smoothly across the surface. The bite of the tabby never let your wrist move as fluidly as this does. The boards track very well indeed, only leaving angles in curves when you draw very fast indeed. These are very precise units, with an accuracy of +/- 0.25 mm. The interface runs at up to 19200, although the software only offers up to 9600 baud. The driver software has a nice GUI front end, and here you can try with different values of DPI. As default they come in at 500dpi, but you can change this to trade off a little smoothness for speed across the page or visa versa.

Resolution

Drawing with these tablets makes mouse-drawing look substandard, with a much higher resolution than anything you'd class as a rival within the price range. You may prefer the smaller area to draw on as it makes moving around the screen easier. As for personal preference, I'd go for the 606. If you're even remotely serious about freehand art on your Amiga, these tablets offer a superb answer for the artist on a budget. A well deserved superstar award to both tablets. ■

Andrew Korn

DIGI PEN 303 & 606
Developer: Micronik

System Requirements:
OS 2.0+, free serial port

Ease of use 90%
We had German instructions but it was still a breeze to get going.

Performance 90%
Outclassed by pricier products but smooth and accurate, and very comfortable to use.

Value for money 94%
Tablets well worth having at these prices? Say no more.

OVERALL
Hardly top of the line but brilliant beer budget graphics tablets.
92%

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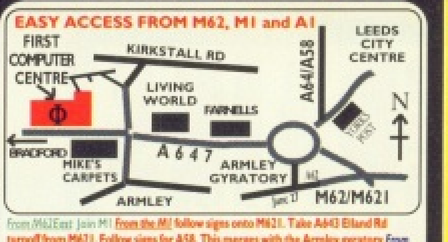
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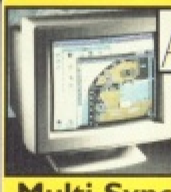
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Micronik Genlocks

■ Price: MG-10: £170/ MG-25: £230 ■ Supplier: Blittersoft UK✆ 01908 261466 http://www.blittersoft.com

First impressions on opening the boxes were that these genlocks were robust and well made, but first impressions can often be deceiving...



▲ The MG-25 will also allow you to individually alter the RGB of the output.

To connect the genlock to your Amiga; first make sure the computer is off; unplug the monitor lead from the Amiga, plug this into the RGB socket on the genlock, then – using the lead supplied, connect the genlock to the Amiga. It couldn't be any simpler than that really.

Of the MG-25 and MG-10 genlocks put to the test, the cheaper MG-10 surprisingly had the nicer buttons, with bright white position indicators so that you can visually check your setting with ease. Beyond that, the main difference between the models is that the MG-25 accepts higher quality SVHS (also known as Y/C or S) signals, so in theory it should be capable of much better performance. Alas the SVHS input on the review model wasn't set up properly so a severe lack of the luminance part of the SVHS signal made checking the higher quality input impossible. In addition to that the invert push button didn't work properly either.

All was not lost, as the SVHS output worked fine, and one of the benefits of the MG-25 is its transcoding of the composite signal (CVBS) into SVHS and vice-versa. This means that if you have only a CVBS source and a SVHS recorder, you can make good use of your recorder's higher quality recording facilities.

RGB altering

Both units have controls for colour saturation, contrast and brightness, in addition the MG-25 has a group of three knobs with which you can individually alter the RGB of the output. There is also a bank of four push buttons that allow you to select "alpha", "invert", "bypass" and "RGB". The extra controls on the MG-25 give you tremendous possibilities with regard to the effects you can generate. Want to do a "pink Financial Times" type advert, no problem – just alter the RGB values to get the effect you want. Press the RGB button and your Amiga monitor shows just the computer output, whilst the record monitor shows the mix effect of the video and the computer graphics, great when you're doing semi-transparent alpha effects and need to see the graphics in solid at the same time.

One curious thing was that although the RGB controls altered both the Amiga graphics and the underlying video, the other three controls (colour, illumin, contrast) only changed the video component.

Fading in and out

Fading the graphics in and out to get a smooth transition is a little fiddley using the "CPU" and "Video" knobs, especially with the larger knobs on the MG-25 as you need a full rotation of the knobs, and they're quite close together. If your are one of those budding DIY enthusiasts who is good with a soldering iron, there is a circuit shown in the manual which allows you to make a remote fader, Micronik thoughtfully provided a socket on the rear of the genlock into which this can be plugged. Use slider type potentiometers and I should imagine you would get some nice smooth fades.

Overall performance

They both perform well, and with careful use of colour, contrast and brightness controls, you can minimise losses caused by insertion of the genlock. The results aren't up to the GVP G-lock we normally use, but it's close. If you want a manually controlled genlock these should do the job, but if you want something controllable from say, within Scala, then the GVP is going to be the better choice.

One important thing to remember when using genlocks is, the results depend heavily on the quality of your video input signal. Use an old video tape with worn sync pulses as the source, and the picture will jump all over the place. Given a decent input signal you can get good results, use a timebase corrector and you can achieve something very professional looking.

All in all both genlocks offer good value for money, picture noise was acceptable with little colour bleed – quite normal for genlocks but if you can afford it, go for the MG-25, as the additional controls and effects are well worth it even if you don't have SVHS facilities. ■

Carol Harmond



◀ Good position indicator buttons on the MG-10 means visually checking the settings is easy.

GENLOCK MG-10
Developer: Micronik
AMIGA SUPERSTAR

System Requirements:
RGB Port, CVBS video source & a Paint/Titling Program

OVERALL
Good value, compared to Lola at £179 & basic Rendale at £145 — **90%**

GENLOCK MG-25
Developer: Micronik
AMIGA SUPERSTAR

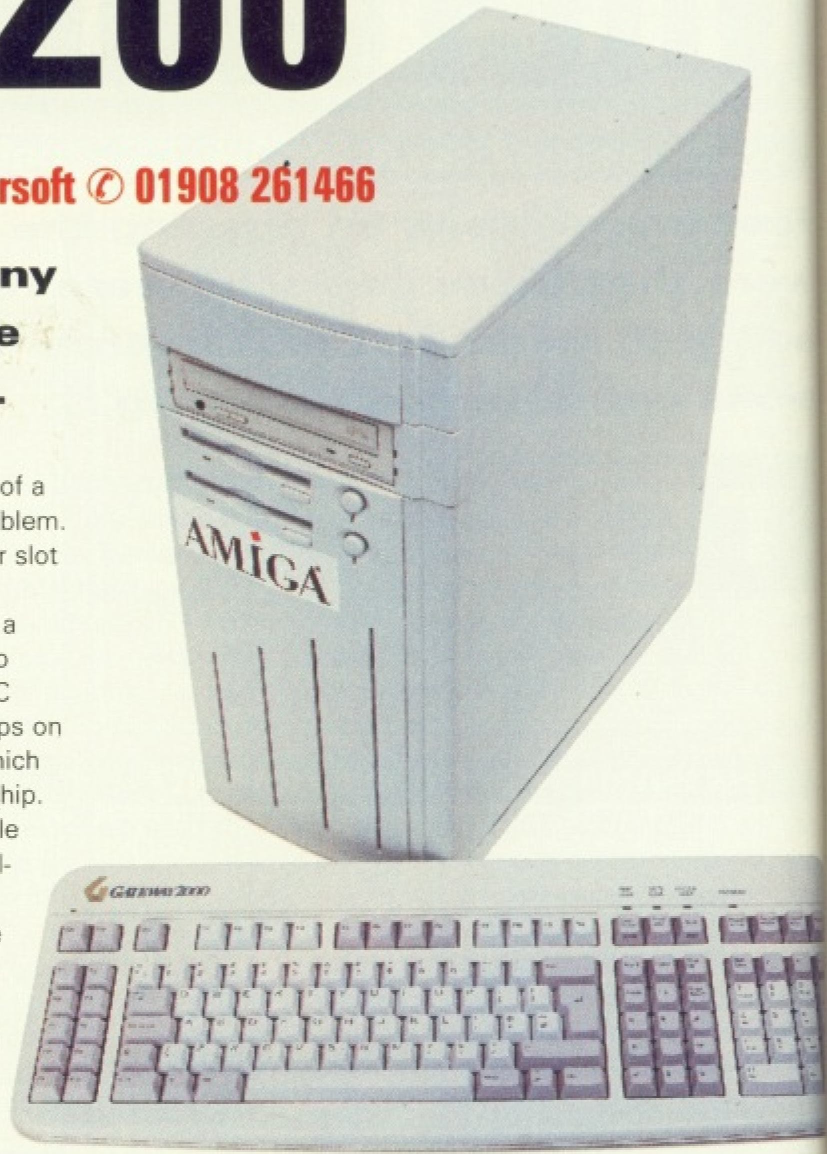
System Requirements:
RGB Port, CVBS or SVHS video source & a Paint/Titling Program

OVERALL
Cheaper than the competition for a SVHS Genlock — **94%**

Infinitiv A1200

■ Price: £159.95 up ■ Developer: Micronik ■ Supplier: Blittersoft © 01908 261466

Even with the help of our DIY articles, many people want a commercial alternative. The Infinitiv tower meets the challenge of ICS.



The first thing we thought when it came out of the box was "Plastic? You have got to be kidding". And ever since, our opinions on this choice have bounced up and down like a yo-yo. There's no doubt that you know what you are looking at when you see a Micronik tower. They are their own distinctive design, a tower purpose built to accept an A1200 motherboard.

The Unique Selling Point of this case is the custom construction. This was built to take an A1200 motherboard and does it very well. Once you have removed the shield from your motherboard it slots very neatly into a removable cradle which slides home into the motherboard.

Plastic fantastic?

To make the case this easy to assemble means that whole thing has to be custom made. This kind of custom fabrication can be very expensive, no doubt why Micronik chose to go for plastic. A point in favour of the plastic construction is that it allows the walls of the case to clip in and out of place for amazingly easy disassembly of the case, a blessing for people like us who are always messing around inside. Additionally this design allows extension bays to be added to the top. On the minus side the plastic is too soft for the deep toothed screws Micronik supply. We would have preferred nuts and bolts or even embedded metal threads; the plastic case is soft and cuts easily – and a screw tore the plastic when we inserted it.

A worrying side issue of the plastic construction is shielding. To give the tower proper RF shielding Micronik have had to spray the inside of the case with a coat of RF shielding paint. There seems to be some danger of accidental shorts being caused by this design, and we have heard reports of a number having suffered exactly this problem.

The busboard links to the accelerator slot on the motherboard via a simple pass through connector. If you plan on using a graphics card, you'll have to fit the video adaptor too. This consists of three PLCC sockets which you have to clip over chips on your motherboard and a trailing wire which has to be soldered to a leg of another chip. The markings on the sockets were a little unclear, but easily figured it out. The soldering on the other hand may cause problems to some – ICs are susceptible to heat – so handle with care if you aren't too experienced.

Disappointingly, the case has some fairly obvious omissions for something custom designed. The built in fascias for internal floppy drives seem a great idea but as they aren't removable, any other 3.5" device must be fitted with an adaptor in a 5.25" bay. With the accelerator pass through connector in case, there isn't enough space in the case for an accelerator, so you must buy at least one extra bay just for the height. An oversight that adds the cost of an additional bay to the basic cost of a tower if you want it or not.

When we assembled the machine, it seemed to suffer from frequent crashes. After a lot of fiddling we traced this to a loose PSU connector. With that fixed we got the machine up and running and immediately hit another problem. The card slots on the rear were a little narrow and our Ariadne card didn't quite fit.

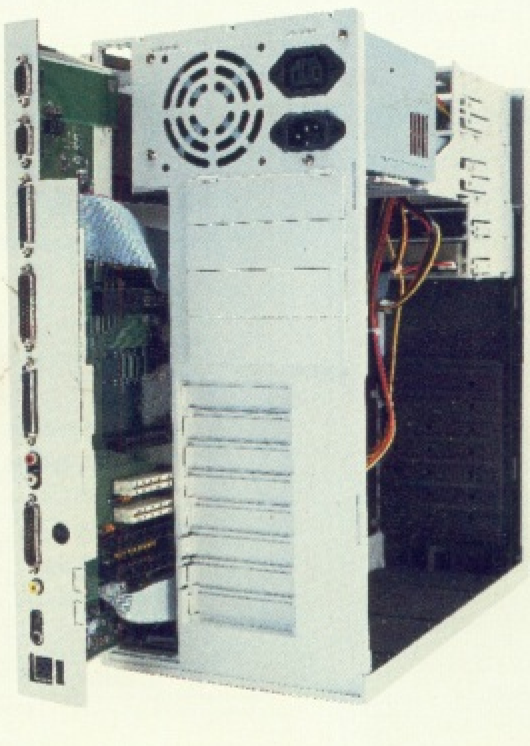
There's a lot to like about with this case, which makes the flaws seem much more unfortunate. It is the closest thing to an official case, which will attract some, but it is a rather troublesome beast, and for the money you would expect a higher overall build quality than this. ■

Andrew Korn

▲ **With the new licensing agreement under their belts, Micronik are the closest thing to an official tower case producer – if not quite as much as this picture suggests!**

Some relative costs.

Amigo Tower, kbd adaptor, PSU	£134.90
As above, constructed	£199.95
Micronik Tower, kbd adaptor, PSU	£209.90
As above plus Zorro 2 board, video adaptor and PCMCIA adaptor	£369.95
As above plus one extra bay of each size	£412.85
Amigo with all of above	£349.80



◀ **The Infinitiv's click assembly makes this kind of exploded view possible. Note the removable cradle.**

INFINITIV A1200
Developer: Micronik

System Requirements:
A1200 motherboard, screwdriver and patience

Ease of use 90%
The cradle makes assembly very easy, the connectors are all well marked and clear.

Performance 82%
Gives you Zorro slots which is pretty nice, but reliability is questionable and shape isn't perfect.

Value for money 82%
A lot cheaper if you go for a package than getting the parts, but still rather steep

OVERALL
A good product that ought to be brilliant.

84%

Amigo A1200 MMS

■ Price: £99.95 up ■ Supplier: Intrinsic Computer Systems ✆ 01474 335294



With tower conversion being probably the most popular pastime amongst today's Amiga users it was never going to be likely that Micronik would have a free run at the commercial tower systems market forever. Two likely looking rivals have surfaced in the last couple of months. The Eyetech tower we hope to review next month, but on this occasion we have the ICS Amigo.

The ICS case has a power supply mounted high, leaving space for the rather elongated A1200 motherboard. A replacement backplate has cut outs for the ports at the back of the motherboard. It is a noticeably taller tower than the Micronik case and takes advantage of this in the number of drive bays. The ICS unit comes with 2 floppy drive bays, two 3.5 inch hard drive bays and three 5.25" drive bays. Plenty of space there.

The power supply is a fairly standard 200 watt unit, more than enough power, and connects to the motherboard either via a Zorro board or a connection through the back of the case into the motherboard power socket if the Zorro board isn't fitted. With the Zorro board in place, the motherboard draws its power from that. Headers on the Zorro board connect a standard power connector from the PSU.

Easy Assembly.

Construction of the case is not a complex affair. The motherboard has to be removed from the case, but can stay in the metal shield.

Internal struts inside the case make the sliding of the motherboard into place a touch fiddley, but once you have it in place it slots easily into the cut out and is held in place with spacers and screws connecting through the motherboard holes. The keyboard interface supplied was a crude solder job but ICS have informed us that they are going to be using Ateo keyboard interfaces in the future, these are far easier to fit.

A long ribbon is provided for the floppy drive and there you have it, a clever solution provided for an old drive problem.

As the internal drives on the Amiga do not have face plates, how do you fit them in a case? Micronik solve this by building face plates into the fascia of their cases, which makes life easy but is limiting. Eyetech have a nice little adaptor which allows you to plug in a PC floppy with built in face plate, but this still means chucking your own floppy. ICS have a solution which is both very flexible and rather obvious. They have made small face plates which slot into place very nicely, allowing internal drives to be used without conversion. They add very little to the cost and unlike Micronik's built in fascia, it allows you to use internal ZIP or FD120 drives, not to mention allowing you the option of connecting PC floppy's via the Catweasel.

Tight fit

Fitting a Zorro card can be a little tricky. The space inside is a bit of a squeeze with mother and Zorro in place, so expect a certain amount of frustration and cursing while doing this. Slotting the Zorro board on after the motherboard was in place seemed to save considerable trouble. Fitting the Zorro board is broadly the same as with the Micronik, as ICS use the Micronik board.

After that is done, all that's then left to do is to plug the LED connector to the LED header on the motherboard, close up the case and you are ready to go.

There's no difference in performance between this and the Micronik. They both have enough power and both use the same Zorro board. Where this tower wins over is on construction. The easy access of the Micronik case just doesn't compensate for the proper shielding, the greater flexibility and the larger number of drive bays as standard that the ICS boasts. Plenty of people will plump for the Micronik because it is so easy to assemble. But where ICS could really clean up is on price. Check the box on relative costs to see for yourself. For a surcharge of around £60 ICS will do all the construction for you. A nice price for a good tower case with all the features. A shock win for the boys from Gravesend. ■

Andrew Korn



▲ The modified backplate allows nice easy access to the slots. Notice the CDDA outputs and power lead grommet.

▲ Don't just take our word for it, we need another tower for the office, and guess where our money looks like going now?

AMIGO A1200 MMS
Developer: Intrinsic Computer Systems

System Requirements:
A1200 motherboard, screwdriver and patience

Ease of use 89%
Not having to remove the bottom shield of the motherboard almost makes up for not having the cradle.

Performance 88%
Seems reliable and trustworthy, plenty of bays, fully working Zorro's. What do you expect?

Value for money 92%
A very nice price and a range of options. They'll assemble it for you for less than the price most charge for a kit.

OVERALL
Maybe not the more professional tower but it is the best.
90%

ArtStudio 2.5

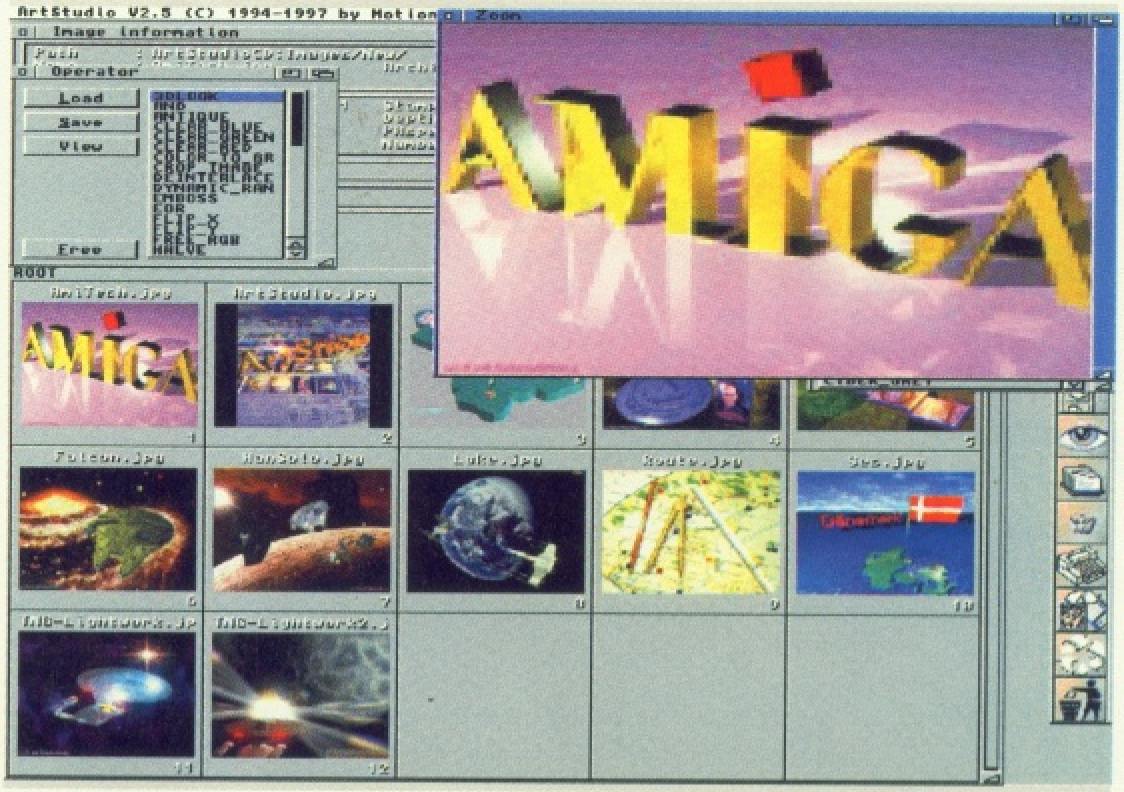
■ Price: 99DM (about £33) ■ Developer: Motion Studios ■ Supplier: Wierd Science ✆ 0116 2463800

We took a peek at a new piece of image processing software from a relative new-comer to the English speaking market. Just how easy was it to use then?

ArtStudio 2.5 comes in two pieces: a CD containing ArtStudio 2.0 and some support material – mainly pictures, plus a floppy containing the ArtStudio 2.5 upgrade. You need to install 2.0, then 2.5, to get up and running.

You'll notice the interface of ArtStudio is unusual compared to most image processors (which either operate on a working screen or with any number of open image windows). You first define a catalogue of images, then get a window with thumbnail representations of the images in your catalogue. After this catalogue is defined and saved you can re-load at any time, provided all of the images are still in place (if you're referencing off a CD, you'll need that CD in the drive next time you work with the catalogue, since ArtStudio will not copy the whole image).

From the catalogue, images are sorted by size, path, depth, etc. You can call up zooms of the thumbnails, or an external viewer, or the built-in routines to examine the entire picture. The catalogueing is good – but there's no ability to mix thumbnail sizes. You can define sublevels of the catalogue, allowing for serious organisation if your picture collection is out of hand.



▶ **ArtStudio is displaying a catalogue of pictures here.**

Image effecting

ArtStudio can also apply effects to images in your catalogue. From the Operators menu, you can flip, emboss, and apply about 40 processes in total. Sadly, this is where ArtStudio's weaknesses begin to appear. The selection process for images is confusing. Clicking the mouse button on an image has one of four effects; it can call up information on the picture, bring up a zoom window for the thumbnail, view the full picture, or mark it for processing. It's your job to keep track and make the mode changes on the fly.

Once you mark an image, you have to call up the Operators menu, then load the marked image into the operator, double-click the operator in the menu, then view your results. If you like them, you can save out the image. You also need to flush the memory once you're done using the "Free" button. All this should be automated, but isn't. Oh, and did I mention these steps are in German?

Sprechen zie Deutsche?

ArtStudio has an English version on the CD and although the main program menus are in English the effect operators are mostly in German. Also, the documentation is only available online, and the AmigaGuide file isn't even properly formatted – with a number of crucial links describing the effects operators inaccessible. You'll have to read the plain text version or edit the AmigaGuide file to make it function correctly. The documentation is also incomplete – for example, it establishes that you can load images from MPEG, AVI, and other animations, but it doesn't explain, nor is it apparent from the program itself, how to load those animations (bar the first frame).

It is actually ECS and AGA compatible, and also supports CyberGraphX, Graffiti, and the native modes of the Picasso and Retina boards. It also loads many image formats, matched only by higher priced competitors although the formats it can "save" are limited. Of the ten formats offered, only JPEG and IFF-DEEP are useful to most Amiga users.

Catalogueing aside, ArtStudio isn't bringing anything new to the table. So for serious work check out ArtEffect, or the program that's still king, ImageFX, as ArtStudio simply doesn't have a place among such peers.■

Jason Compton

Changing the guard

Amiga graphics manipulation packages have seen many changes. For years, ADPro ruled, but when ASDG became Elastic Reality, ADPro all but vanished and former young Turk ImageFX 2 from Nova Design took top spot. Photogenics then rose as a lower-price product but legal troubles and the sinking of Almathera forced Photogenics to the background. Haage and Partner's ArtEffect filled this gap nicely. Personal Paint's conversion and effects capabilities blur the lines between conventional paint and image processing programs. And for those with less to spend, the past two years have seen a growth of high quality shareware and freeware, including the Dean brothers' ImageStudio and Simon Edwards' Image Engineer. So it seems like everyone's had a hand in this particular variety of software lately!

ART STUDIO
Developer: Motion Studios

System Requirements: OS 2.1, hard drive, 4 megs Fast RAM 3.1, AGA or CyberGraphX, Faster Processor recommended

Ease of use 40%
Atrocious. Several problems encountered, including poor translations.

Performance 79%
It does exactly what it says on the tin.

Value for money 50%
There's much better products on the market either side of the price range.

OVERALL
Good for a cataloguer. Poor for an image processor.

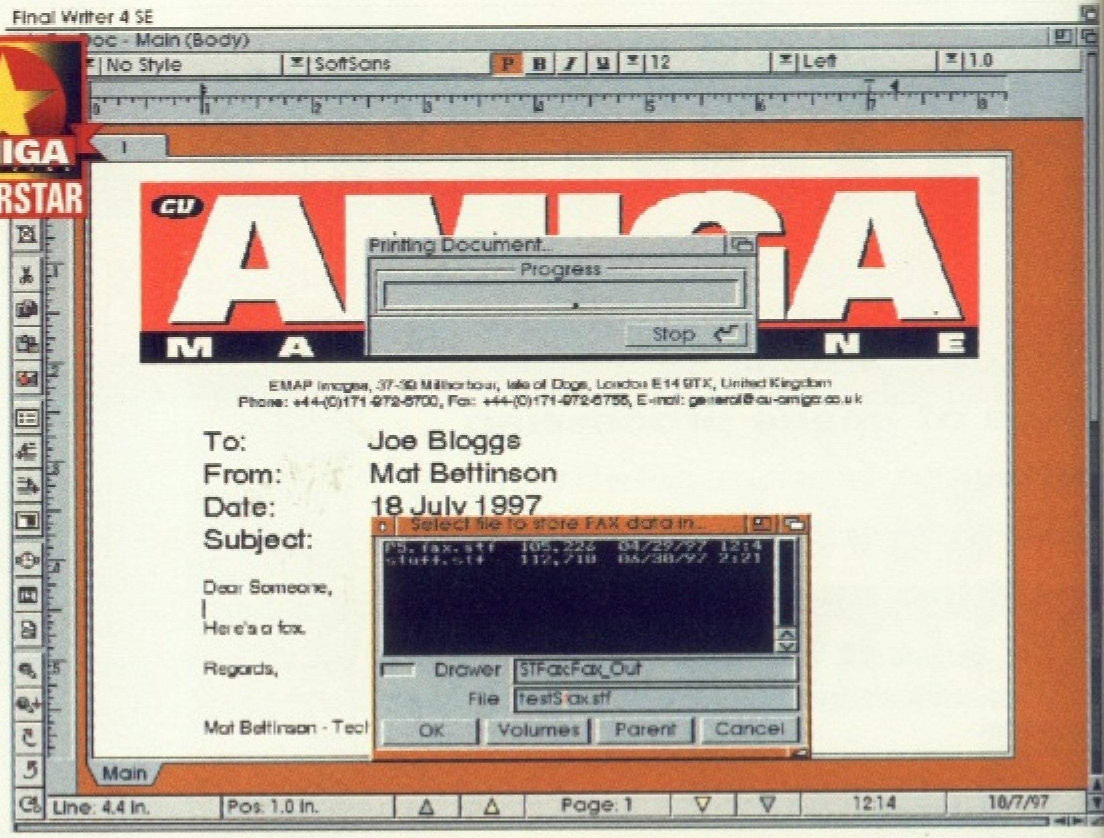
61%

STFax

AMIGA SUPERSTAR

■ Price: £20 ■ Developer: Simone Tellini
■ Supplier: CUCD (Magazine drawer)

Even if you're sold on the prospect of the Internet, a modem is also damn useful as a fax. The new STFax promises ease of use in shareware form.



▲ Here's a fax, having been composed in Final Writer, now printing to STFax. A requester optionally appears to ask for a filename for the resulting fax file. This can then be faxed immediately or scheduled for a late time.

There are those with modems and those without. Generally those with modems are on the Internet and so have a 28800 baud modem or higher. I'm yet to see one of this specification that didn't have some form of fax capability built-in. Better still, even the cheap 14400 variety have acceptable fax capability and most usually will go as fast in fax mode as the more expensive modems.

£40 pound fax machine

Will a £40 pound modem really take the place of a fax machine? Damn right it will... and do a better job! A normal fax machine scans in a document and faxes at the same time. Using STFax, we can print out directly from a word processor into STFax without ever wasting paper. STFax acts as a printer driver when the little 'printer driver' check box is selected on its low profile GUI.

STFax support Class 2 and Class 2.0 (which is different believe it or not) and the bog standard Class 1 kind that every modem should at least support. I got STFax to work on a very finicky USR Courier Class 2.0 so long as the baud rate was taken down to 19200. I also got it to work with an extremely cheap 14400 baud Tornado modem from Wizard Developments. However, even with the latest drivers I couldn't get STFax to use my GVP IO Extender serial board. Obviously STFax has a problem with third party serial boards as this is the first package I've seen not to work with the GVP.

STFax, unlike GPFax, comes in one version. When it has run it queries the modem to find out what it supports and then issues the appropriate commands. This results in some delay at times but it does the trick and seems to take some of the error out of the process. STFax will act in auto-answer mode also so that incoming fax calls are picked up and answered. The resulting faxes can be viewed and printed out with ease. However GPFax's scaling functions are missing so one has to scroll around the very large monochrome bitmap to read the fax. Not a problem for printing of course.

Let's schedule a fax

STFax has your usual scheduling functions. That means that during the day one could print out a variety of faxes and schedule them to various telephone numbers at various times of the day. Useful for queuing the calls in off peak periods, especially for international faxes. STFax doesn't need to automatically answer the phone, you could use your telephone as normal and press 'receive' when the fax tones are heard.

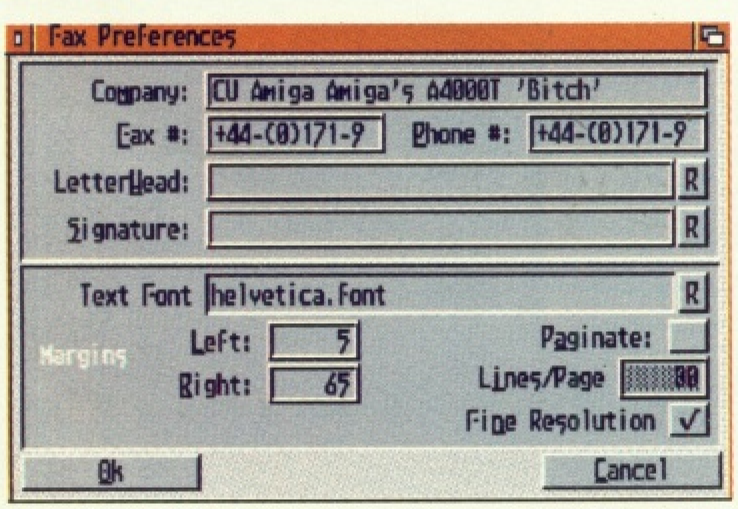
STFax will also compose new faxes based on text alone, rather than the full graphic print output of a word processor. So sending a text based fax can be very quick. That said, more professional results are achieved by working from a template word processor blank fax document, with graphic header and so on. As ever, the fax arrives looking far better than an ordinary scanning fax document.

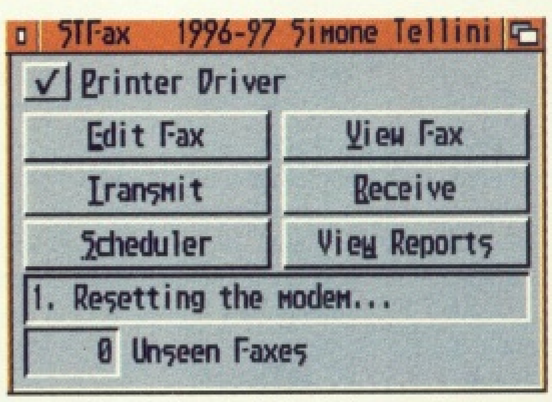
Shareware concept

You can't really fault a packages functions identically to the highly rated GPFax, especially as it's free to try out. However, to get the full auto answer functions and get rid of the nagging requesters, there's a registration fee of 50,000 Italian Lira (under 20 pounds). Simone has to be congratulated on bringing a quality shareware fax package to the Amiga at last. Let's hope the shareware concept does the right thing by him. ■

Mat Bettinson

▼ The Fax prefs GUI of STFax lets you set the banner information see at the top of your Faxes.





▲ Seen here is the main STFax GUI front end. If the printer driver box is selected, STFax will intercept the output of Word Processors or any software which prints.

STFAX 2.90
Developer: Simone Tellini

System Requirements:
Kickstart 2.x and a fax capable modem.

Ease of use 92%
After initially tweaking, run, print and fax. Zappo.

Performance 91%
A few little features need work but the product is full featured and being updated regularly.

Value for money 96%
What more could you ask for? A fully working shareware fax package is just what we needed.

OVERALL
Need a fax? Get STFax.
93%

AMIGA

ISLONA

WORK, REST AND PLAY, PLAY, PLAY



Fasten your seat belts and be prepared for an experience like you've never seen before on your Amiga. Flyin' High is here and it takes you to a new dimension of 3D-Racing Games. Step on the gas and race over fully textured and absolutely crazy tracks, on asphalt, mud, field paths and slippery ice.

On an 68030 Amiga the games great fun. Playing with 4 players on a 68060 is really impressive.

A special Track Construction Kit will be released in the future!

System-requirements: Amiga, MC68020, AGA-Chipset, 4MB Fastram, Harddisk. Fun starts at MC68030 running with 30MHz. 4player adaptor supported.

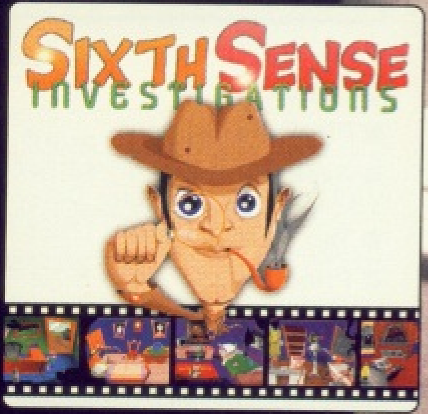
Amiga CD : £29.99 Amiga Disk : £29.99





"Sixth sense investigations" is a new graphics adventure for the Amiga, based on the classic LucasArts style games. The base storyboard tells of a crazy young guy who has the ability to communicate with the spirit of a sarcastic man. A friend, who thinks of himself as a detective, profits from the pychic abilities of his freind - the crazy psychic guy, by using his skills to solve the most bizarre problems of the rich. *Naturally*, only if well paid.

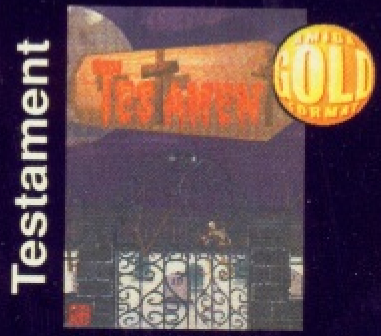
The lack of control that the detective has over the crazy psychic guy, and the fact that the psychic guy has little control over the spirit, generates many crazy, funny situations which doesn't help them to make much money.





Super-smooth AGA 256 colour cartoon graphics, full charactor voice-overs, 3 Worlds with 32 locations, Intro film sequences. Requires A1200/A4000 etc 2MB ram, CD-ROM drive.

Amiga CD : £29.99



When it gets dark, the living dead begin their celebration on the graveyard. Make your way through swampy tracks and dark tomb monuments.

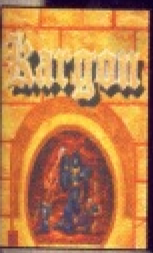
Rated 92% £19.99



Marblelous

100 brain teasing levels each more difficult - you control a metalic ball using your mouse and have to find your way to the exit.

£7.99



Kargon

Kargon is a completely new challenge! Up to 4 players can compete in order to find one thing out: Who the greatest magician among them is.

£12.99



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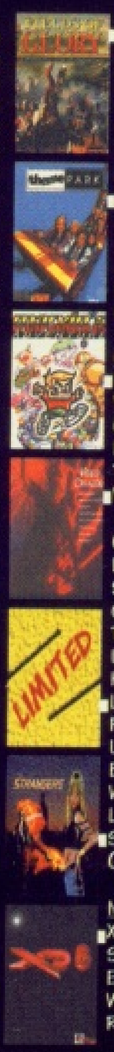
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PD Scene

It's a gaming frenzy this month, as Tony Dillon looks at the best titles for you to spend your coppers on.

★★★★★	Totally blinding
★★★★☆	Good
★★★☆☆	Average
★★☆☆☆	Substandard
★☆☆☆☆	Oh dear

Starboy

■ **Platform Game**

■ **Available from:** F1 Software, 31 Wellington Road, Exeter, Devon EX2 9DU

■ **Tel:** 01392 215569

■ **Price:** £3.99 per disk & 75p P&P

They do say imitation is the sincerest form of flattery, and if that's the case, those folks at Millennium responsible for James Pond and Robocod must be blushing redder than a sunburnt fox right now. To say this excellent platform title has been influenced by one of the best Amiga platform titles ever is like saying Boeing were pointed in the right direction by the Wright Brothers. The look and feel of the game isn't as polished as the original, but then this isn't the work of a cast of thousands.

Here you play Starboy, a boy who gets his name from an ability to throw stars around at will. Starboy's mission is to work his way around some maze-like levels, collecting all the bonuses and toys he can, avoiding or destroying his enemies, and generally trying to get to the end of the level. Everything you liked about Robocod is here: the bright copper backdrops, the enormous enemy sprites, the cute rounded background graphics and even the long scrolling sections where you travel in small aircraft/cars/whatever, taking out everything in your path.

OK, so I've made the point that it isn't the most original game ever found in a PD library, but it sure is fun. It looks good, sounds good, and most importantly it feels good to play – something that many PD games seem to lack. ★★★★☆





Full marks go to Superballz

Game of the Month...

Jackman

■ **Puzzle Game**

■ **Available from:** PD Power, 15 Lovetot Avenue, Aston, Sheffield S26 2BQ

■ **Tel:** 01374 150972

■ **Price:** 50p per disk & 75p P&P

Oh dear. A Pacman clone, written in AMOS. I've never realised before what 'blood running cold' meant, but the thought of yet another badly programmed clone! Once the game was loaded, however, I quickly learned that you should never judge a book by its title. Although it does have some of Pacman in there (a small yellow ball runs around the screen eating smaller yellow balls), there are no ghosts and no flashing power pacs. Instead you have a series of convoluted levels with walls and barriers closing it into smaller areas. Your quest is to figure out exactly how to get every pac on the screen, which is a lot easier than it sounds.

The puzzles are completely inflexible – that is to say there is only one way to solve each one, and very fiendish they are too. From the simple act of pushing a block out of your way, to using blocks to destroy transporters, so you can get beyond them, to pick up a power pac, that allows you to knock a hole in a wall, to grab the heart and finish the level (takes a deep breath), and that's only level three!

Many people say that AMOS games can never be any good but this is a perfect example of not blaming the tools. It's a highly addictive little puzzler of a game, that will keep you playing well into the small hours. ★★★★★



Superballz

■ **Arcade Game**

■ **Available from:** PD Power, 15 Lovetot Avenue, Aston, Sheffield S26 2BQ

■ **Tel:** 01374 150972

■ **Price:** 50p per disk & 75p P&P

I have to admit that Marble Madness has always been one of my favourite games. There has been few games released in the past decade that have made me bite my tongue with concentration in the same way.

The idea is quite a simple one – take a marble, place it on the top of a slope, give the player some rudimentary inertia control, and then throw some obstacles in the way. For example, make some parts of the slope incredibly narrow, or put spikes in the way that can burst your marble. For added fun, you can have some special tiles, that do things like accelerate your marble towards the edge of the slope, or throw it into the air.

Believe it or not, but David Reed's Superballz actually adds to Marble Madness's appeal. As well as the basic task of getting from the top of the screen to the bottom, this game throws in the need to trip a series of switches to open the exit at the end. There are all sorts of nasty surprises for you to watch out for, and the level designs are quite spectacular, doubling back on themselves and sending you all over the shop – causing you to use your brains just as much as your reflexes.

In addition you can have two players competing on a split screen, either together or in a race for the finish line, which makes it an exceptionally playable arcade game. Top marks go to that man! ★★★★★

Hop Shop Volume 1

■ **Music**

■ **Available from:** PD Power, 15 Lovetot Avenue, Aston, Sheffield S26 2BQ

■ **Tel:** 01374 150972

■ **Price:** 50p per disk & 75p P&P

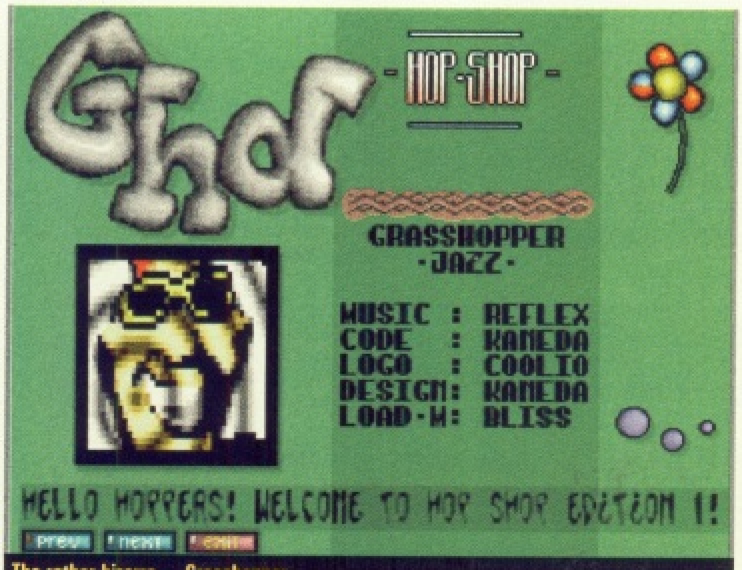
This one had to go in. I don't know why exactly, but something tells me this is the sort of thing that every Amiga owner just has to get their hands on. As a demo, it's a bit of an oddity. After all, you would assume that the real purpose of putting a demo onto the PD market is to show the world which areas of computer entertainment you excel in. We've got stunning slideshows, incredible animations and unbelievable screen manipulation out there. And then we have Grasshopper. It's essentially a song about, believe it or not – Grasshoppers, of which the content isn't even accurate. Well that's what Mat (our insects and invertebrates expert) reckons. Apparently the lyrics…

"Grasshoppers have got six legs –
connected at the thigh,
They've also got a pair of wings
but they cannot fly-y".

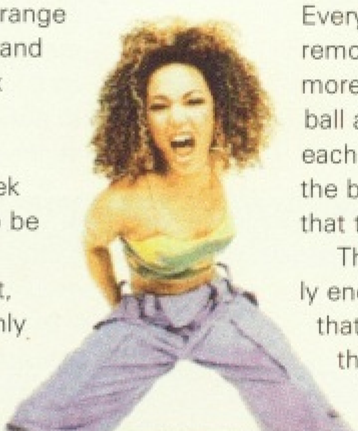
… aren't true because they can actually fly.

Anyway, what you have is a very strange eight bar jazz piano and bass melody, and someone who calls themselves Reflex singing over the top of it about how Grasshoppers are green. I can't tell whether it's been done tongue in cheek fashion or not, as the author seems to be quite proud of his creation.

All I can say is, try and check it out, then decide for yourself. This is certainly one of the most bizarre disks that we have ever received. ★☆☆☆☆



The rather bizarre… Grasshopper.



Lineae Coloris

■ **Strategy Game**

■ **Available from:** Arrow Dynamic Software, PO Box 7, Dover, Kent CT15 4AP

■ **Tel:** 01304 832344

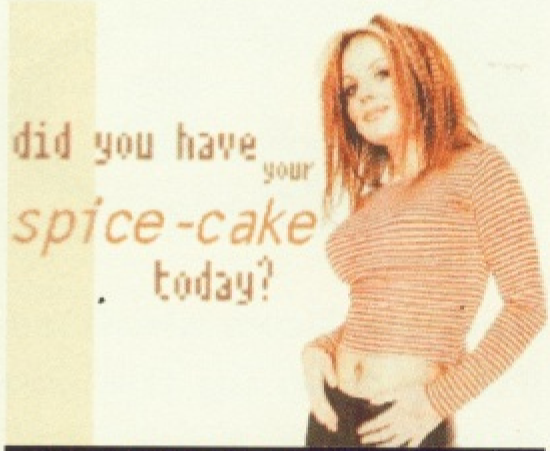
■ **Price:** £3.99 per disk & 70p P&P

What collection of public domain software would be complete without a boardgame, based upon some Chinese pastime or other.

This time it's the turn of Yugoslavian title Lineae Coloris, a reworked Connect 4 with some interesting touches. Essentially you start with a large grid containing three coloured balls. You have to arrange them on screen in lines of five balls or more. Every time you move a ball without making a line, another three balls are added to the grid. Every time you make a line, that line is removed from the table, giving you a little more room to manoeuvre. You can move a ball as far round the table as you like with each move, the only constraint being that the balls can't move diagonally. Have you got that then?

That's really all there is to it, and strangely enough it's quite compelling. It's obvious that a game like this is never going to set the world alight, but it certainly is good for a few hours. The presentation is pleasant enough, with a pretty good choice of colour and layout, and the controls are both obvious and instant.

This kind of single player game is always a tricky thing to sell, but if you're the kind of person who likes to sit down with a copy of Solitaire, then chances are you're going to find this engaging. ★★★☆☆



Out of Spice: A spice girl… and they say good taste is dead.

Out of Spice

■ **Demo**

■ **Available from:** Saddle Tramps PD, 1 Lower Mill Close, Goldthorpe, Rotherham, S63 9BY

■ **Tel:** 01709 888127

■ **Price:** £1.60 (for 2 disks) plus 50p P&P

OK, time for a demo. Out of Spice may sound like something which afflicts the kitchens of short-sighted Indian restaurateurs, but in this case the spice in question is the foul five headed hydra of banality which is currently afflicting the music industry and public consciousness instead.

There's actually very little in this demo to do with the girls, and it's all a matter of swirly tunnels and lighting effects. Only a couple of Spice girl images popping up now and then remind you of the inspiration behind this piece.

The demo is pretty short, as tends to be the case with disk based demos these days, so you reach the credit sequence in very short order. Luckily the credit sequence is very impressive with a beautifully implemented colour ripple effect. Simple and effective, this would get an extra star if I didn't dislike the Spice Girls so rabidly. ★☆☆☆☆



Coloris



Starboy

PD Utilities

Andrew Korn shuffles around the world of PD to drag up the best and worst utilities from magic tricks to 3D specs...

★★★★★	Totally blinding
★★★★	Good
★★★	Average
★★	Substandard
★	Oh dear

Magic Tricks

■ **Type:** Magician support disk

■ **Available from:** Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester M26 2SH Tel: 0161 723 1638

■ **Price:** £1 plus 75p P&P per order.

Well, the idea is simple enough. These are three card tricks presented using CanDo and Hyperbook. Rather than being simple 'how to do a card trick' guides, these are kind of magician's buddy systems. You have these running while you do the trick, and use the computer to supply the answer.

The tricks are all based around variations of the magician's 'force', ways of letting someone pick any card they like while making sure it is the one you wanted them to pick in the first place. In this version, the victim picks a card, then puts their hand on the screen and concentrates, and at the click of a mouse their card is displayed on screen. I can't help feeling that people will be a bit wary of something so obviously prepared as this computer program.

I once turned up at a friend's house and performed this trick with the answer written on some paper in my pocket. This worked well because it seemed more mysterious for being so crude and low tech. Somehow a computer second guessing you is easier to accept than someone having the card you'll pick written on a scrap of paper somewhere.



Magic Tricks

Nevertheless, the tricks here are good enough to get your friends scratching their heads in puzzlement. Not much to it, and nothing you couldn't rig up yourself if you already know the tricks, but it's cheap and it's fun. ★★★

Boot Utils

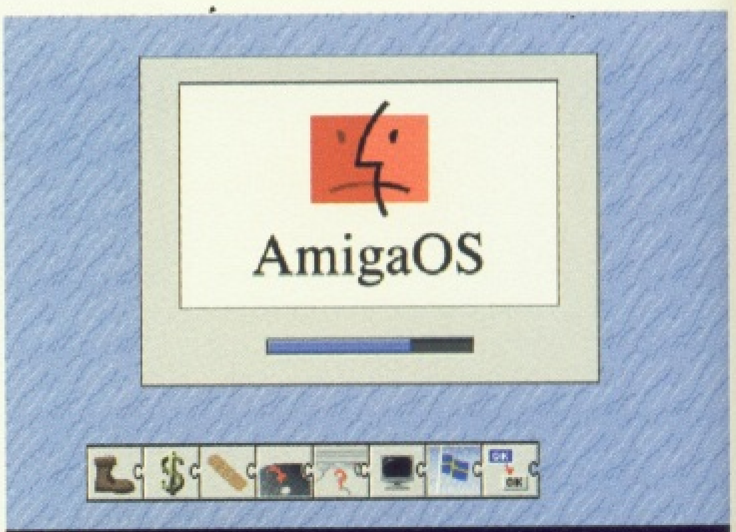
■ **Type:** Boot-up screens disk

■ **Available from:** Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester M26 2SH Tel: 0161 723 1638

■ **Price:** £1 plus 75p P&P per order.

I have to admit that boot-up screens just aren't my cup of tea. However plenty of people do like them, and if you are so inclined this disk is for you. There are actually six different boot programs here, with varying degrees of functionality. The most extreme is probably Bootbar, which makes your Amiga boot like a Mac, with extension icons appearing along the bottom of the screen and a progress bar running across the middle. There's even an Amiga OS version of the MacOS smiling face, this one frowning no doubt at the incredibly long boot-up times this leaves you with – another realistic borrowing from the Mac. Bootpic and Infoboot actually give you some simple information about your Amiga when it boots up. Not that you aren't likely to know, but it's a nice touch and perfect for show-offs.

Password21 is yet another password protection utility, RainBoot has all sorts of options for playing graphics and sounds and so on, and StartupPlus is a MUI start-up manager that looks quite powerful. All in all an excellent collection for anyone who wants to put a bit more life into their start-up sequences. ★★★★



Boot Utils

Demo of the Month...

Stereo Op Jr

■ **Type: 3D graphics**

■ **Available from: F1 Software, 28 Newbridge St, Exeter, Devon EX4 3AU. Tel. 01392-215569**

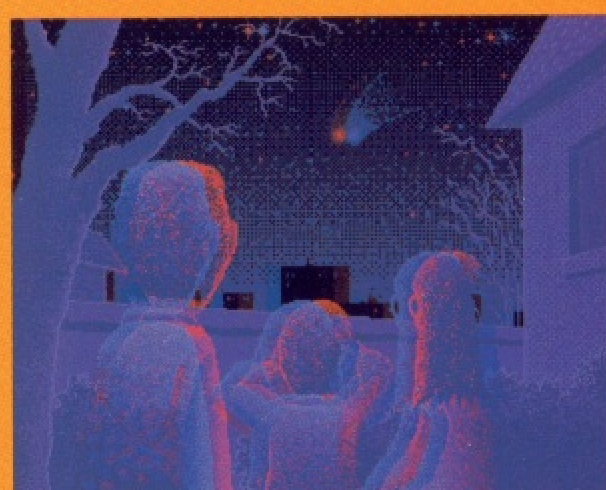
■ **Price: £3.99 plus 75p P&P per order.**

What a simple notion! A very straightforward piece of software which produces layered 3D images using three images, one as midground, one as foreground and one as background. There is also a little 3D game which works, but is best left unmentioned.

The 3D procedure used here is that old favourite of using two primaries, with one filtered out of each eye, to produce differentially displaced images for each eye. If that meant nothing to you, then it's the one with the red and blue 3D glasses. For your four quid, a Blue Peter like DIY kit is provided to make your own spectacles. They tried to get some pre-made specs but apparently couldn't locate any.

Using this is very easy. The instructions are clear and easy and there are a few examples on the disk. Making a 3-D image is a simple matter of hitting the start key and selecting a previously drawn foreground, midground and background. The package does the rest.

The complaints about this package are the kind that you tend to get with AMOS Intuition problems, dodgy file requesters, instability on machines with a spec better than a decade old and so on – but the program performs and the results are good. This is a package probably more aimed at kids than adults, but don't let that stop you having fun. ★★★★



Shareworld Magazine

■ **Type:** Disk mag

■ **Available from:** Roberta Smith PD, 190 Falloden Way, Hampstead Garden Suburb, London NW11 6JE.

■ **Tel:** 0181 455 1626

■ **Price:** £1.80 plus 50p P&P

The disk magazine market is an interesting one. These things are more like a digital forum than a magazine in that the ratio of contributors to non contributing readers is pretty high – these are very much community efforts, with pretty low distribution figures. They tend to be largely done by a small number of very enthusiastic people and are usually full of personality. The only way of really understanding what disk magazines are all about is to get one, and this is a very good one start off with. There's nothing in here which is monumentally brilliant, but it's nicely enough laid out. There's also plenty of spot illustrations and logos littering the text, with background music and a gallery of pics – which range from utter trash, through bad but funny, to really rather good. You'll find that a certain amount of it is rather self referential, and you aren't going to be able to make much sense of the protagonists.

If you like it, you'll pick it up quickly and get to know characters involved... then, who knows, get involved yourself. ★★★★☆

Adventure Writer

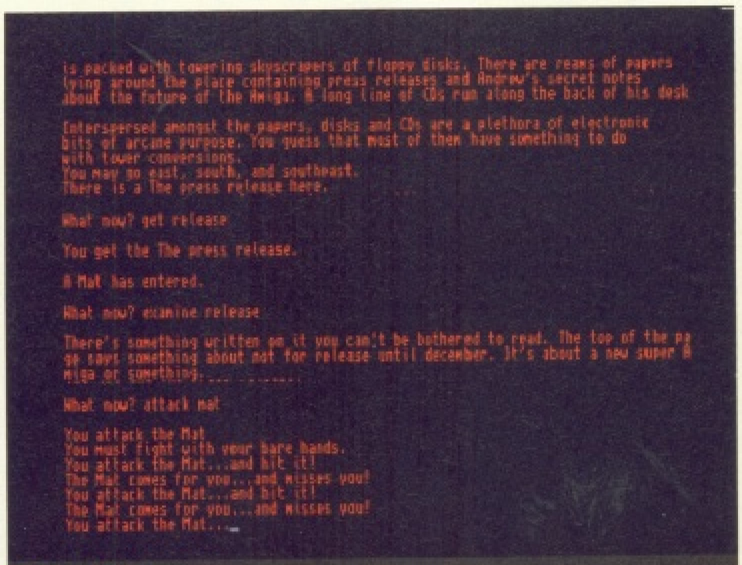
■ **Type:** Oh pay attention!

■ **Available from:** PD Power, 15 Lovetot Avenue, Aston, Sheffield, S26 2BQ

■ **Tel:** 01374 150972.

■ **Price:** 50p per disk & 75p P&P.

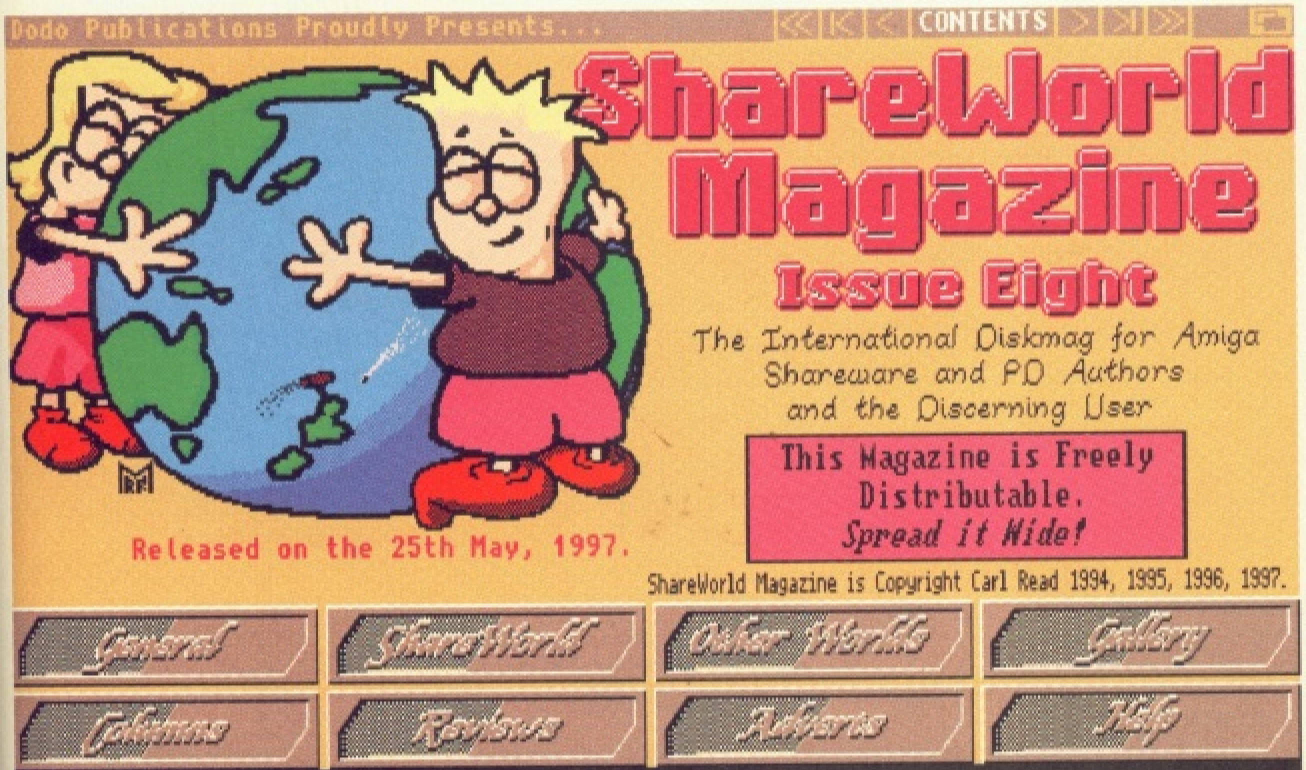
Adventure Writer is intended to take all the dog work out of programming adventures. It is designed so that you can write an adventure without even knowing what a scripting language is. The result is that there are distinct limitations to what you can do (objects have a very limited set of properties, and anything else you want them to do needs you to find a work around using flags), but using it is monumentally easy. I wrote a seven room adventure with five objects and five mobiles in about an hour without bothering to read the instructions first. This is the easiest adventure writer I have found.



Adventure Writer

Alas there are problems. Firstly this is a pretty unstable monkey. The editor had a nasty tendency to crash without warning on an '030, and the game engine seemed to occasionally get confused about the location of objects. Secondly, the data entry system is pretty abysmal. If you want to change the amount of damage a weapon causes, you can't just choose to edit that one part of the object, you have to redo the entire object.

Overall as a demo of the shareware product this is the kind of thing that makes you think "Yes! I'll register for this... if the next version has a few decent bug fixes in it". Getting the PD demo however costs very little and if the idea of writing your own adventures sounds fun, you can do quite a lot even with this version. A bit of work and this could be a very nice package. ★★★☆☆



Shareworld Magazine

Aminet

Uploads to Aminet continue thick and fast, and if anyone ever suggests the Amiga is a dead platform, point them toward the recent uploads list and see if they still think so. Check it all out, with full download support, via your Web browser on http://wuarchive.wustl.edu/~aminet/recent.html or a number of mirror sites.

Starting off with the lighter side of life, all SWOS fans should head straight for game/patch/swosted20.lha (79k) where they will find a new and rather excellent SWOS team editor. It isn't the smooth, stable MUI wonder some other SWOS editors are, but its custom screen layouts are very good and it has some very nice extra features. You're still left the problem that all these editors unpack but do not re-pack the team files, and the English leagues are too big for SWOS unpacked. Fortunately for us, Santiago Barrachina appears to have his own copy of RNCpacker, because he's provided us with game/data/premier96-97.lha (24k) which has fairly up-to-date English league data and works. No Overmars at Arsenal, but at least there's Bjorn Kvarme at Liverpool. People desperate for the Amiga's answer to Command and Conquer should try game/demo/commandstrike.lha (170k) which looks very like the real thing. Probably because the graphics and sounds are nicked straight from the original. Pity that absolutely none of it works, but it'll raise a few eyebrows.

Let's get a bit more serious for a while and mosey on over to gfx/3d/geo2vrml.lha (22k) where you'll find a program which converts videoscape 3d objects to VRML objects, very nice if you are into 3D web pages. Japanese speakers should say konichiwa to text/edit/kezako_1_55.lha (315k) a brave if a little flawed kanji (Japanese characters) implementation. For those who were taken by last month's coding feature and liked the sound of the brilliant Amiga specific C variant, E, try dev/e/E_xpack1.lha, a beginner's guide.

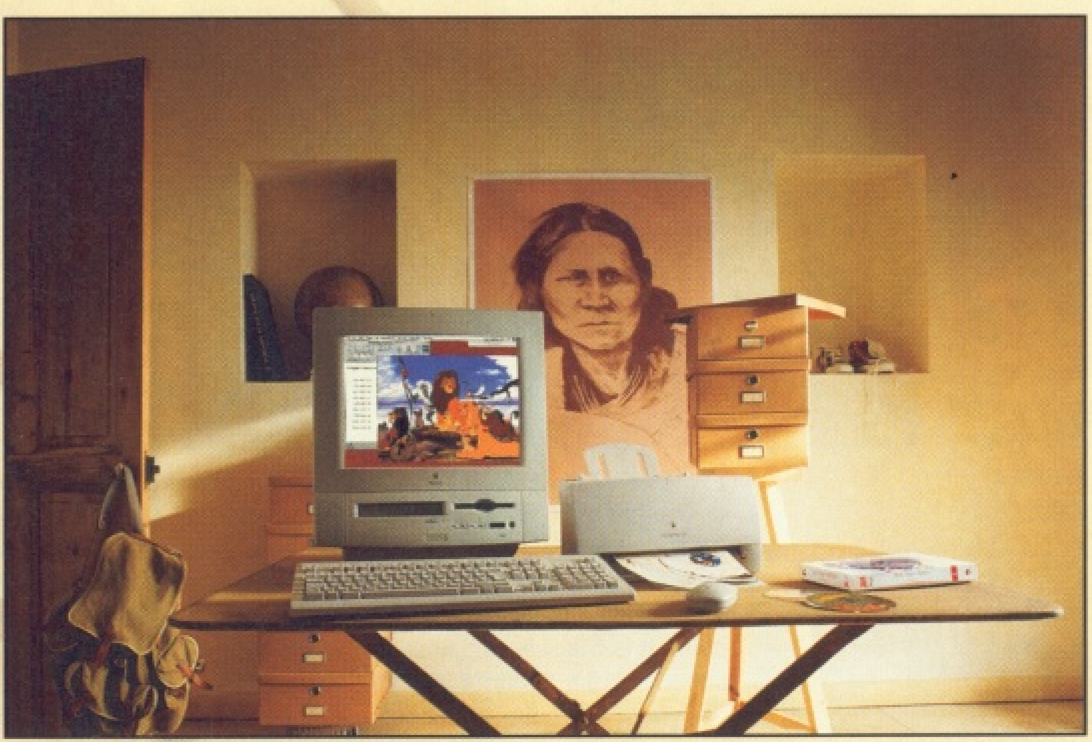
If you think the Men In Black are reading your E-mail, you might want comm/mail/yaypy.lha (14k) the latest Yamm PGP implementation.

Leaving all that hard and serious work aside, it's surely time for a demo. Pick of the recent crop is probably demo/intro/ap-profusion.lha (79k) a nice little demo with some glorious light sourced voxels and the like from Artificial People. Remember that all these files can be acquired from most PD libraries and if you don't have internet access many libraries will actually sell you a disk crammed full of the downloads of your choice.

Why Apple?

One day we all hope to see the rebirth of the Amiga with a PowerPC processor and other new features to enable it to compete again with today's systems. Sadly though, more than 2 years since Commodore's demise, little of substance has actually happened. We've seen prototypes and heard promises... we all hope to see new Amiga developments.

If you can't wait and need more performance today, without paying the earth - there's only one real alternative to consider... There's never been a better time to think Apple!



Only Apple offer you both desktop and portable computers that truly match the ease of use the Amiga brought to your desktop. Affordable Apple Macintosh systems have PowerPC RISC processors with thousands of off-the-shelf programs available in areas where the Amiga was always previously so strong.

And, if you need the most compatible of all computers, Macintosh is currently the only system that can run MacOS, DOS and Windows applications via optional DOS Cards or SoftWindows software.

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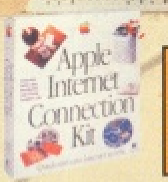
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PM5500 Black Mac	225	603e	32	2.0Gb	✘	✔12	15" Integral	✔	✔	✘	✔33.6	Design	£1820	FAMILY PACK
PM6400	200	603e	16	2.4Gb	✘	✔8	15" AV M/S	✘	✘	✘	✔28.8	Design	£1292	HOME OFFICE
PM6500	250	603e	32	3.0Gb	✘	✔12	15" AV M/S	✘	✘	✘	✔33.6	Design	£1938	HOME OFFICE
PM6500	275	603e	32	4.0Gb	✘	✔12	15" AV M/S	✔	✔	✔	✔33.6	Design	£2525	CREATIVE STUDIO
PM4400	200	603e	16	1.2Gb	✘	✔8	15" M/S	✘	✘	✘	✘	Design	£1280	✘
PM7300	166	604e	16	2.0Gb	✘	✔12	✘	✘	✘	✘	✘	Extended	£1643	✘
PM8600	200	604e	32	2.0Gb	✔	✔12	✘	✘	✘	✘	✘	Extended	£2407	✘
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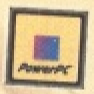
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Why Macintosh?

Performance:



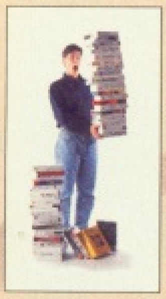
All Macs are PowerPC based. Even entry level desktop systems run at 160MHz or 180MHz, with 275MHz powerhouses and 200 MHz multi-processor systems at the top of the range. Even portables offer 240MHz!



Apple is the only mainstream computer company who has been able to make the transition from the older CISC (complex instruction set computing) processors to the newer and faster RISC (reduced instruction set computing) processor technology - whilst still retaining full backward compatibility with previous software.

Remember 486, Pentium/Pro & 680X0 are merely CISC!

Software choice:



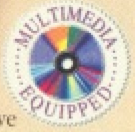
Over 1,800 native software packages (written specially for PowerPC Processor Macs) have been shipped since Power Macs were launched in 1994 - plus there are thousands of existing programs which can also be used. Industry standard programs such as Word, Pagestream, Word Perfect, Page FileMaker Pro, Excel, Quark Xpress, Photoshop and many others have all been developed for the Mac.

Creativity:



- Macintosh still dominates the creative world with an 80% market share in colour publishing.
- 65% of post-production video editing is on Macs.
- Macintosh is the most widely used system for the creation of Internet web pages.
- Most magazines (probably the one you're reading right now) are created on Macintosh.

Multimedia:



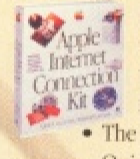
- Apple is the World's No. 1 Multimedia PC vendor.
- All desktop Macs have a fast CD-ROM drive as standard (many portables have internal CDs too).
- In 1995, 42 of the top 50 selling CD-ROM titles worldwide were developed on the Macintosh.
- Many Macintoshes have built-in TV with teletext so TV clips can be recorded directly to disk as QuickTime movies.
- Many Macintoshes have built-in video in and out, for direct recording to VCRs.
- Several Macintoshes have internal digital video editing facilities as standard and many others can be upgraded to include this facility with ease.



The Internet & Communication:



- All Macs are Internet ready; many include a 28.8 or 33.6 modem with full send/receive fax and answerphone management facilities.
- Industry standard web browsers, Netscape Navigator and Microsoft Internet Explorer, were developed for the Mac. Both give full access to all Web sites with new Internet page layout features like auto-tables and on-screen movies.



- The Internet's standard format for video files, called QuickTime, or QuickTime for Windows, are both Apple products. Of course QuickTime comes as standard with every Mac.

Connectivity & Expandability:

- All Macintoshes have networking built in as standard, so connecting systems together and adding shared printers etc. couldn't be easier.
- All Macintoshes have an external SCSI connector as standard - adding external drives, cartridge drives, scanners etc. really is Plug-and-Play.
- Low-cost digital cameras can be plugged into the Mac for instant real image input.
- Inexpensive industry standard PCI cards can be used in all desktop Mac systems.



Education & Edutainment:

- Many quality Macintosh titles are widely available. Dorling Kindersley offer superb titles like The Ultimate Human Body and History of the World whilst Microsoft publish Encarta, Cinemania and Dinosaurs.
- Because Macintosh is the preferred system within many educational establishments, high quality software is assured.



Recreation & Games:



- Top games like The Ultimate Doom, Myst, Rebel Assault II, Dark Forces, Descent, Afterlife, Lost Eden, Legend of Kyrandia, Full Throttle and The Dig have all been developed for Macintosh.

Output & Presentation:

- Connecting and using colour printers (from Epson, HP, Apple and others) to Macs is so easy and the results are truly outstanding.
- Many software packages are available offering image manipulation and superb photo quality output.



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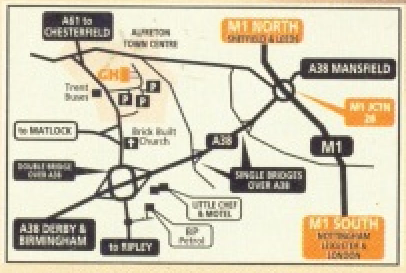
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CD-ROM Scene

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Aminet 19

Aminet 19

■ **Available from:** Weird Science Ltd, Q house, Troon Way Business Park, Humberstone Lane, Leicester. LE4 9HA
■ **Tel:** 0116 2463800.
■ **Price:** £14.95 plus £1 P&P

The sky is gloomy and brooding, and Summer appears to have burnt itself out after a single glorious July week. Despite this I am happy. I booked my holiday for that sunny week, and therefore retain a sunny disposition on my return. It is because of this that I can face the prospect of reviewing yet another Aminet disk with clear and total equanimity. Even the thought of mentioning that it has a gigabyte of archives on it and it's the world's largest collection fills me with not an iota of concern.

It has the old faithful Aminet front end. It has 115 Mb of games, 150 Mb of mods, 240 Mb of pix, giving it an entertainment balance which is looking familiar of late. I say that kind of thing every month, but I'm too unwound up to be all that bothered.

It comes with CanDo 2.5 and AmiAtlas pro. No complaints there. It's got PPaint NewIcons exporters, a plethora of patches, demos and locales from Haage & Partners. There's B-Prolog, apparently the fastest version of my favourite 4GL. The games section is absolutely top notch, containing many of the big game demos that have appeared recently, as well as a lot of truly excellent PD releases such as the monumentally nutty Kick it. It's so full of good stuff it ought to be tedious to go on about it yet again. I should be railing against some perceived failing, criticising it for the sake of being different, turning savagely upon it after its long-term success like a rabid tabloid journalist baying for the blood of a star – whom he has been as guilty as any of hyping. But frankly I'm far too relaxed to be bothered. It's Aminet. Maybe not the best, nor the worst, but Aminet none the less. **88%**

CD of the Month...

Scala Plug In

■ **Available from: Weird Science Ltd, Q house, Troon Way Business Park, Humberstone Lane, Leicester. LE4 9HA**
■ **Tel: 0116 2463800.**
■ **Price: £29.95 plus £1 P&P.**



One of these sorts of things comes a long every now and then and makes interesting viewing. The world is stuffed full of 'reference material' CDs – they're ten a penny, so when a disk full of backdrops and fonts turns up for 30 quid you want to know why?! This collection is aimed squarely at Scala users, offering a range of plug-ins of all the various types you might be expected to come across. The presentation is as straightforward as it comes, with a directory for each of the major data areas, animation, backgrounds, brushes, buttons, fonts, music, script and sounds. There are thumbnail presentations where appropriate, but no time has been wasted on viewer front ends. This is very much a package aimed at the professional market – there is an expectation that you are likely using Scala anyhow, and have the knowledge to get what you want out of this disk without any help or flashy front ends. This is purely and simply a resource disk.

The general quality of the plug-ins supplied on this disk is very good. There is no doubt that you can find collections of images and fonts a lot cheaper, but the question is whether you would be able to find one which contains data which is so appropriate to the uses of multimedia presentations, which these will be put to with Scala. The backdrops aren't all just random picture backdrops of the type you might see on a Workbench screen, these are clever, high quality backdrops all the right size and well designed for presentation graphics usage. There is a collection of samples and mods which are of a universally decent quality and have clearly been carefully selected for appropriateness and so on.

The reason why this disk may appear a little expensive compared to bog standard image collections is that it is aimed squarely at the professional market. In this context it is actually rather cheap. A press release recently arrived in the office announcing the release of a multi format image collection CD at $500 US, so £30 is hardly breaking the bank. Anyone seriously using Scala can't have enough resources and this one would be an excellent addition to anyone's collection. 88%

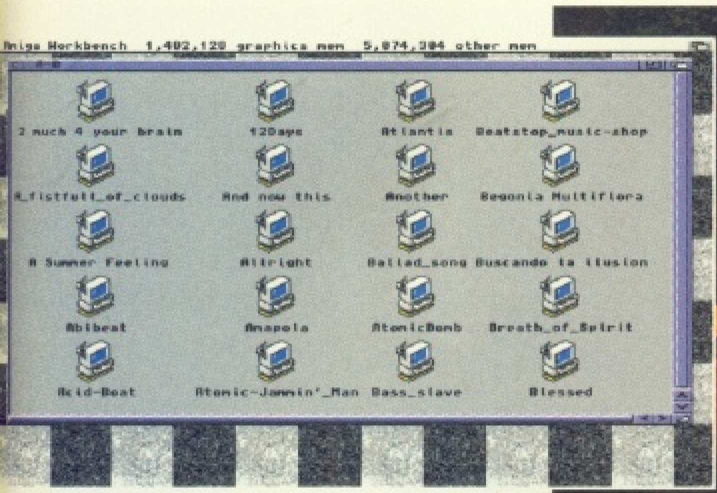
EuroCD #2

■ **Available from:** Weird Science Ltd, Q house, Troon Way Business Park, Humberstone Lane, Leicester. LE4 9HA
■ **Tel:** 0116 2463800.
■ **Price:** £11.99 plus £1 P&P

Here we go again. EuroCD 2 is a follow up to the rather impressive EuroCD 1, a compilation disk with a distinctly Euro scene slant to it. The front end works by the well trodden 'rely on Workbench' route, the individual spin being the use of their intriguing custom written filetype handler. A program called ViewMenu is called up as the default tool of every project icon. Viewmenu will then select an appropriate file viewer and display the file. A full assortment of file viewers is provided, but if you don't want to use the default, you need only edit the ViewMenu prefs files and you can choose your own viewer. A nice touch, if slightly unstable.

EuroCD 2 has a nice spread of software, very much a bit of everything. I found the layout and presentation to be sensible and well balanced, something that collections like this often take a few disks to get right.

The old problem of all such compilations plagues this. It's all very well being Urban Muller and having the whole of the Aminet to draw forth your new software from, but compiling a disk like this leaves you with some selection difficulties. There has to be a





EuroCD #2

lot that people haven't seen before, but there also has to be a nice balanced selection, which tends to mean a liberal smattering of old favourites.

While EuroCD attempts to do this, it doesn't really manage to do more than give the disk a little extra demo scene flavour. A strong but hardly revolutionary collection at a nice price, a brilliant purchase for someone just starting their CD collection, but a bit old hat for an old hand. **85%**

Geek Gadgets 2

Available from: Weird Science Ltd, Q house, Troon Way Business Park, Humberstone Lane, Leicester. LE4 9HA

■ **Tel:** 0116 2463800.

■ **Price:** £19.95 plus £1 P&P

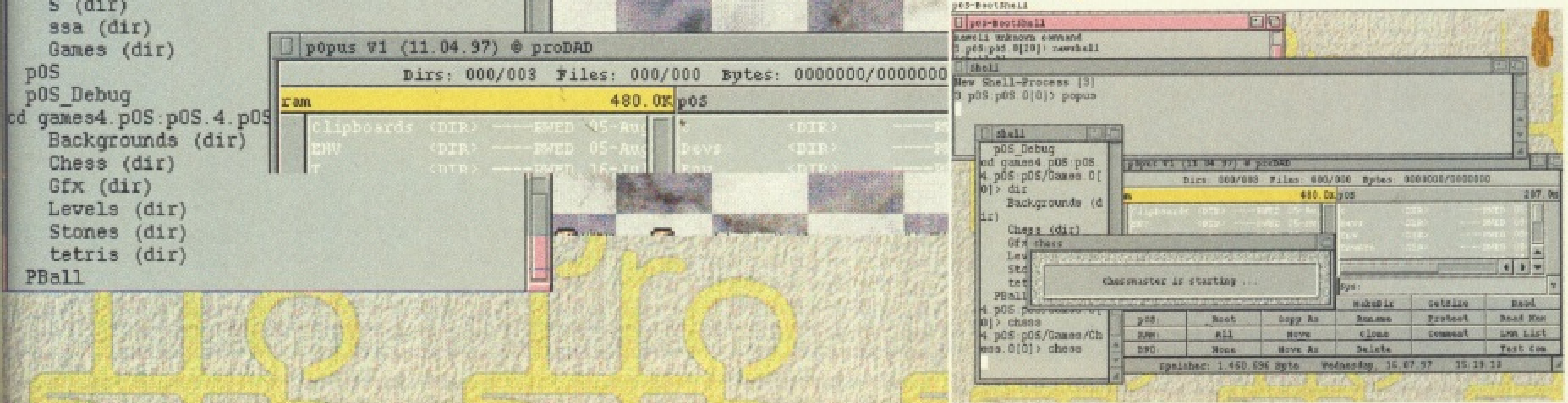
Geek Gadgets, the CD no self respecting Amiga geek has to have, goes into version 2. The core part of Geek Gadgets is the ADE, or Amiga Development Environment, a project started some time ago and continuing today. The ADE is a collection of UNIX ports designed to bring a lot of the programming convenience and power of the UNIX to Amiga developers.

You can read our full review of the original Geek Gadgets disk on page 62 of our March issue. We were generally impressed by the depth and to a certain degree the functionality of the tools here, but had complaints about the ease of use. The trend here is still for the original GNU documentation to be provided instead of more Amiga specific instruction, but to be fair this simply isn't a disk which is going to have any value to the casual user anyway.

The ADE is regularly updated – Internet uploads every month or two providing users with the latest versions. The version on this disk is the mid April one, which is a small but significant advance on the older disk, one notable update being the inclusion of CybergraphX and Picasso96 support for the work in progress X11R6.1 X-windows port. There are also compilers for C++ and Fortran, the EMACS editor, a GNU debugger, TEX and so on.

A notable inclusion on this disk is PPC support. As well as some PPC support for the C compilers, there is also an 'alpha' version of pOS, the new PPC operating system from Prodad. This is the 68k version only – and the current release is more full of holes than a Swiss Cheese at the OK coral, but there is enough here to keep developers going until the pOS pre-release CD is released later this summer. Also, expect to see pOS shareware appearing soon.

There is a lot going for this disk, but it really is for hard-core coders only. If you fall into this category and didn't manage to get hold of disk number 1, then this only makes the argument for getting out your wallet that much stronger. **84%**



Geek Gadgets 2

Art Gallery

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Explorer by Peter Spinaze



That old Imagine/Photogenics/Ppaint/Dpaint partnership clearly works for Aussie Peter Spinaze. Gorgeous planet textures and strong lighting are the keys to this excellent image, with its unique style that falls mid-way between a classic render and a chunky cartoon.

Circus by Peter Spinaze.



Overdosing on the rainbow plasma, this one must have taken a fair while to render, but what is that car doing there?

Viper Blue Squadron by Erol Kentli



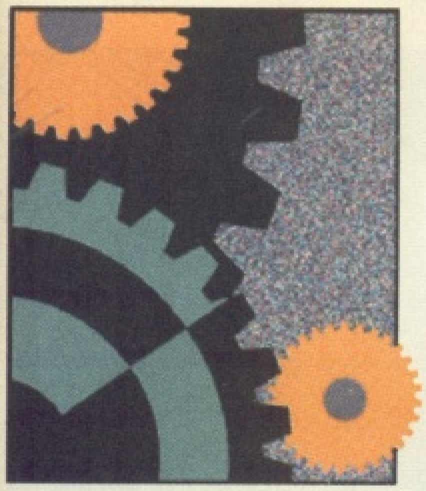
Spaceships renders can tend to look a little cliched, but Erol's use of blurring to make the ships more dynamic makes this stand out amongst the hard edges of most similar images.

Gundam by Darren Bentley

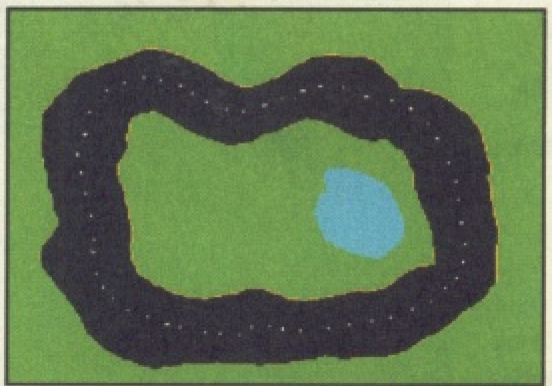


A rather well designed model of a Japanese style giant robot. It would be good to see a more finished render with this model, with some nice grimy textures.

Amiga Workshop



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Imagine 4.0 p76



Surf's Up p84



Sound Lab p88

Regulars

PART 9

Imagine 4.0

Remember when you were young and enjoyed racing model cars? Now you can do it the virtual way, thanks to Imagine 4.0.



Last month we looked at making an animation of a car following a road. In order to make it as realistic as possible, the car followed a path object, and changed direction as required so that it turned into corners instead of skidding around them. I mentioned that it was possible to make use of the backdrop feature to quickly make an accurate path based on the road itself, so now let's have a look in detail at how that can be achieved.

As before, the road itself is nothing more complicated than a simple bitmap created in Personal Paint or any other paint program. The more detailed you make it the better, in this case I'm using only three or four colours. I'm also making the brush about 380 by 280, as this is roughly the size of the edit window panels. You might want to make two brushes: the first about this size, and the second – the one which you'll use in the finished render – a factor or two or more larger. Higher resolutions will mean more detail included in the finished render.

Assuming you've drawn out the road map, load Imagine and create a new project. Go to the Stage editor, and click in the Top view window. From the Display menu select the 'Load Backdrop' option, and locate the map graphic. It should be loaded as displayed in the top pane. See pic 1.

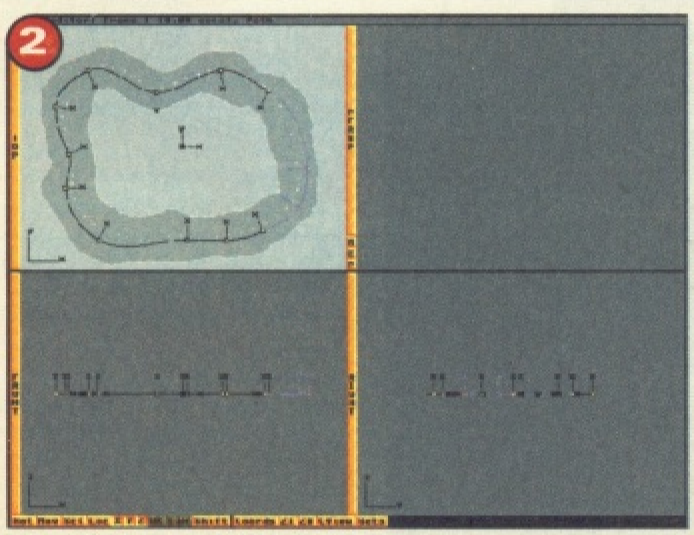
If you require a more detailed view, clip on the Top vertical bar to expand the window to fill the whole screen (a useful tip which many Imagine users are still unaware of). To get back to normal, click on the Top bar once again. Map2.iff

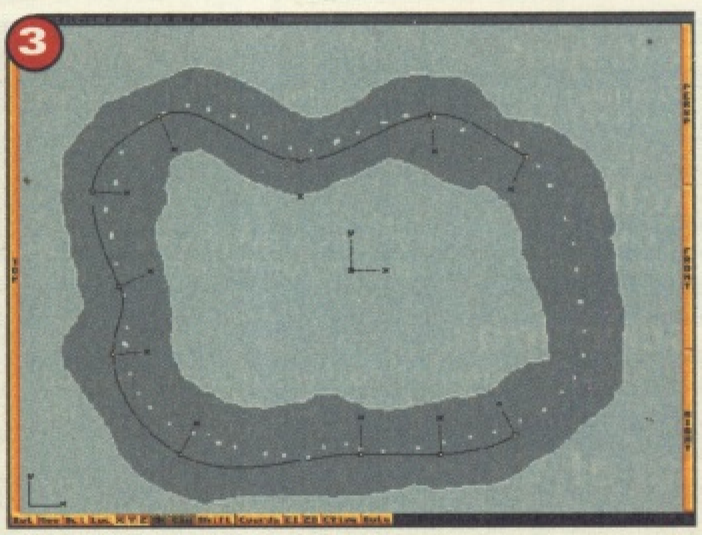
Path forming

Now to create the path which the cars will follow. From the Object menu, select Add and 'Closed Path'. We want a closed path because that implies that it forms a loop, and we want the cars to continue around the circuit ad infinitum. You'll be asked for a name to save the path under, so pick something like 'circuit'.

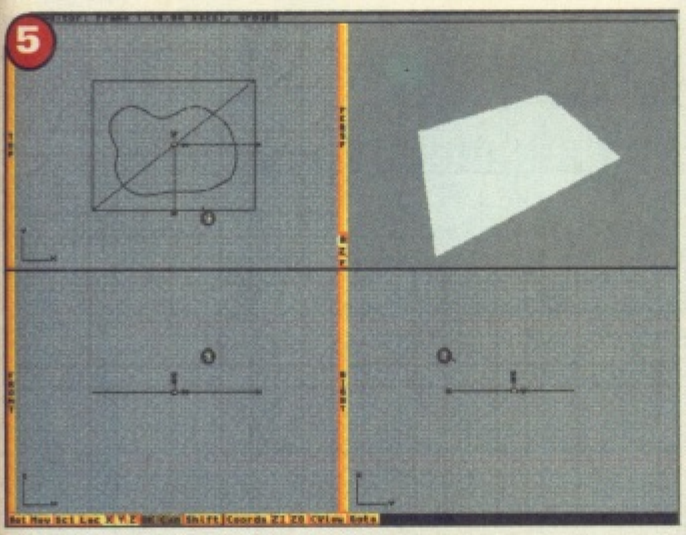
The default path will be a circle, and we need to edit it to make it follow the twists and turns of the road. To do this we need to add more control points. Each point we add to the orbit gives us another handle with which to bend and warp the path. You can rotate the points if you wish, but in this case simply moving them will suffice.

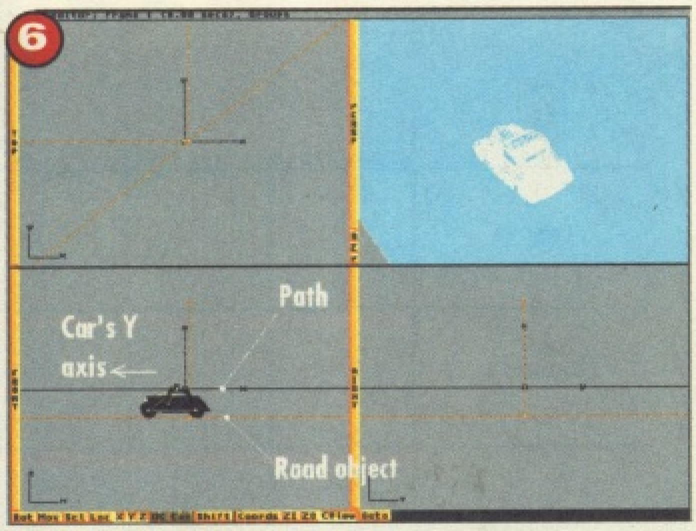
To edit the path, select 'Edit Path' from the Mode menu. Now click on one of the two control points which you should see, and select 'Split Segment' from the Path menu. This adds a new control point. Repeat this process, until you have a few points around the path. Now click on one point at a time, select Move (or press M) and drag it to the required

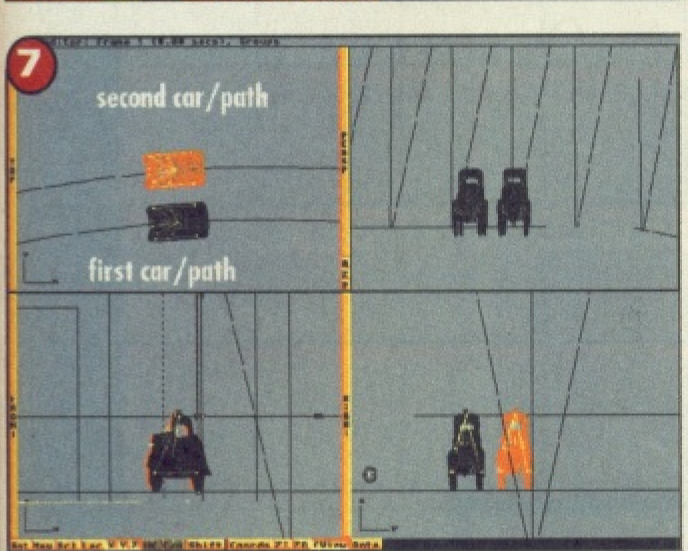


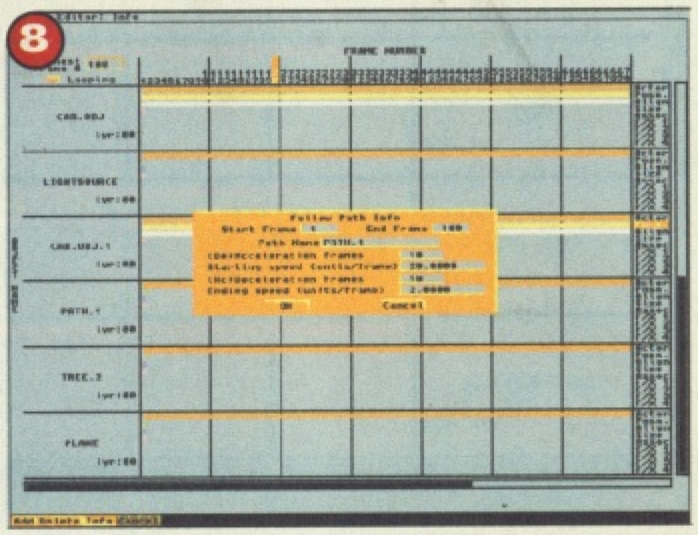












position. Remember to click on 'OK' once the point is in the right location. Map3.iff

When you have the path finished, save your work and head to the Detail Editor. Here we need to create the real road object, not just the backdrop. Create a plane of the same dimensions as the map graphic, and then apply the map as a brush texture. Now save it. Map4.iff

Now it's back to the Stage Editor. The path object should already be present, so load in the road object. You will need to scale and rotate the road until it looks the right size compared to the path. For an as-yet unexplained reason, you will also find that you need to rotate the road 180 degrees around the Z axis or else the path and map will be back-to-front with each other. Map5.iff

Load in a car object to race around the track. As explained last month, the car will need to have it's internal Y axis facing in the direction of travel – if not, when the car is set up to follow the path, it will try and drive side on, upside down or in reverse. You will also need to alter the relative positions of the path and road object to suit the height of the car. Very probably the car object will follow the path with the path passing through the car body, instead of at the bottom of it's wheels. Here's what the final set-up should look like. Map6.iff

Pay a visit to the Action Editor, and set the number of frames to 50 or 100 – depending on how fast your Amiga is, and how long you want it to spend rendering. Make sure all the objects are active for all frames, then delete the car object's initial position and alignment bars, replacing it with new ones which cause it to follow and align itself to the circuit path. Add a light source, play with the Global settings and then render a few frames to make sure everything is working.

Let's go Racing

Let's add a little more interest. First of all, from frame one of the Stage Editor select the car object and then clone it (use 'Clone' from the Edit Menu). We now have a another car to race against. However, we can't simply make this car follow the same path, or else the two objects would simply overlap. The obvious solution is to create an entirely new path for it, but this is too much like hard work – so instead, select the existing path, clone it, and then scale it slightly. You should make it larger so that then side by side, the two cars aren't touching. Map7.iff

Visit the Action Editor again, and make sure the second car is following the second path. To avoid having the cars simply driving around like a pair of idiots, adjust the acceleration and deceleration settings so that one car zooms off ahead of the other one. You'll find these settings when you are changing the path which the second car is to follow. Map8.iff

The camera never lies

Now for an important trick, and one which will make all the difference to your animations. When you watch TV, spend a little time watching how the camera works. Think of watching the Grand Prix: rather than having one camera watching the race from the sky, there are half a dozen cameras situated around the circuit in various locations. When the cars pass by the camera tracks them, and when they pass out of shot the director cuts to another camera.

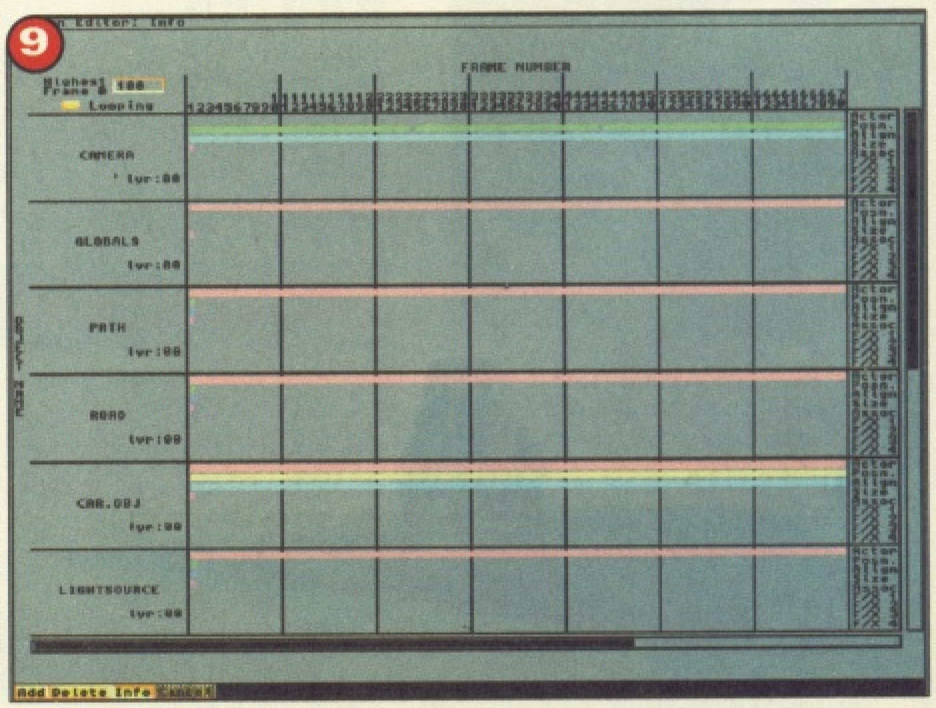
Although Imagine has only one camera, as the director you have the same degree of control. From one frame to the next, the Imagine camera can move from one location to another. Tracking objects as they whizz by is automatic.

Tracking is normally discouraged in Amiga animations, and for a good reason. When you pan the camera, the entire background moves from side to side. This means there is a lot of information changing, and this in turn makes the animation itself larger. A larger animation might play back a little more slowly, or take up too much space to be stored in memory. If you keep the camera steady by avoiding any tracking, then the objects only will move which results in much less changes per frame.

Of course, there are always exceptions and a car race is one situation when no tracking at all will look artificial and awkward. As you are the director it's entirely up to you and you'll probably find the best solution is a mixture of well-positioned steady shots and tracking.

Positioning the camera is easy, but you have to make sure you don't accidentally set up a 'tweening' movement, causing the camera to drift across the landscape from position to position (though of course you may want this effect – it's entirely up to you!).

To locate the camera, simply pick the right frame from the Stage



▲ **Change the camera's position bar from this...**

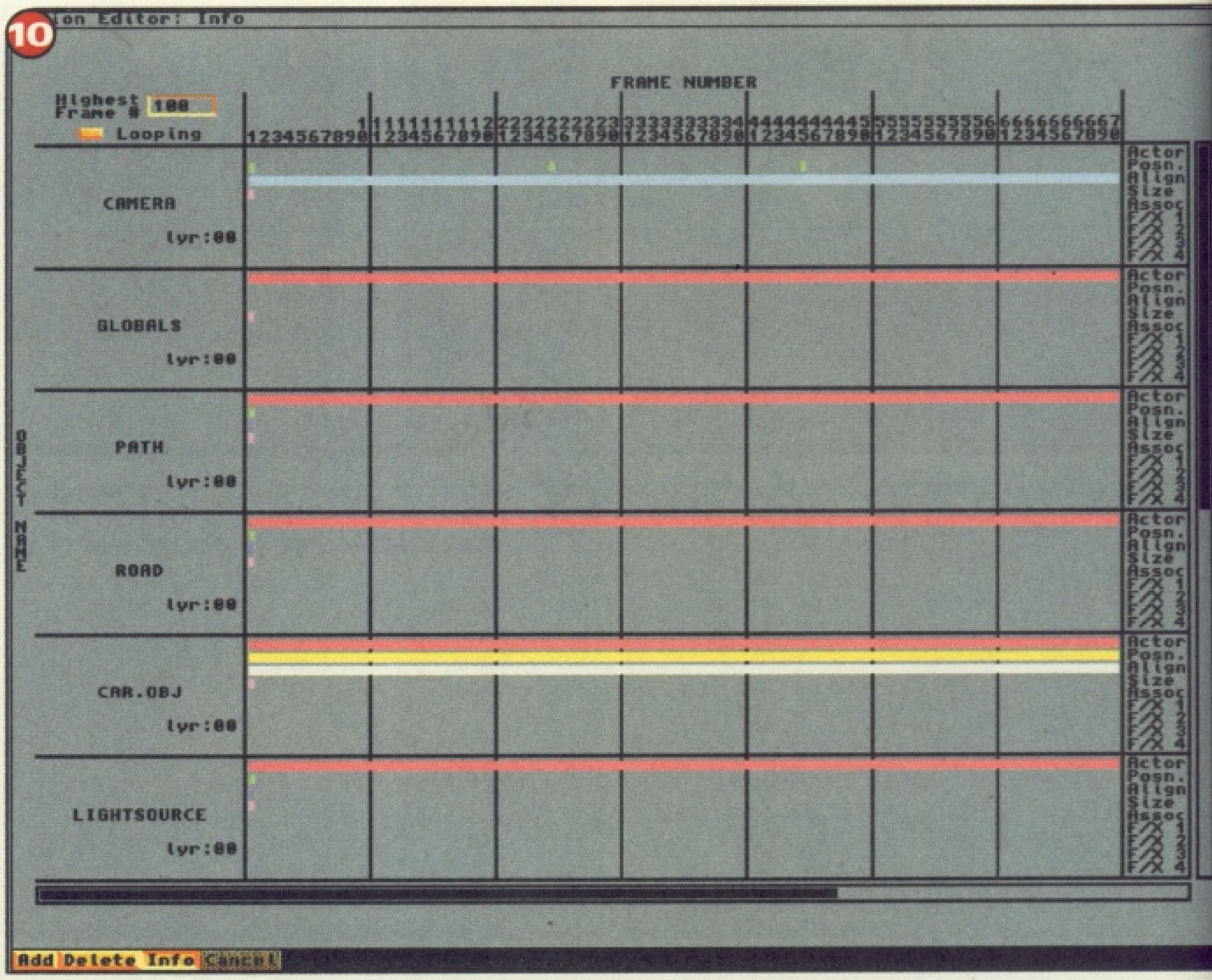
Editor. Then select the camera and drag it to it's new location.

Move to the next frame when you want it to change, and move it again. By default you have just set up a series of tween points, and the camera will drift between them. To prevent this occuring, and to make sure the camera instantly moves from one location to another, go to the Action Editor.

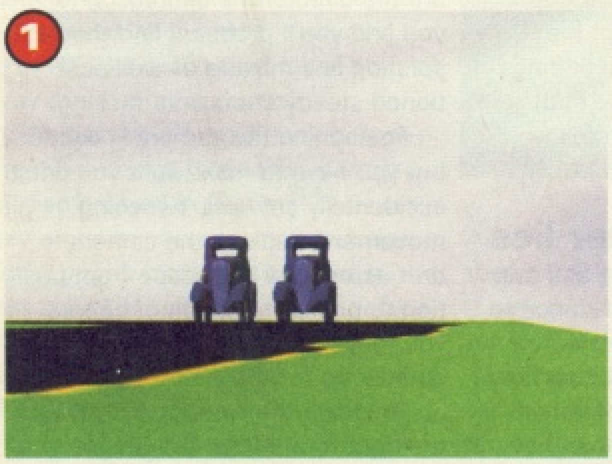
You'll see that the camera's position bar contains several sections. What you need to do is edit each one so that instead of lasting from frame 2 to frame 50 (say), it starts and ends on the same frame (50). You'll therefore have a single position marker at 1, another at 50, another at 75 and another at 90. Between these settings, the camera will remain at the last position defined. Map9.iff map10.iff

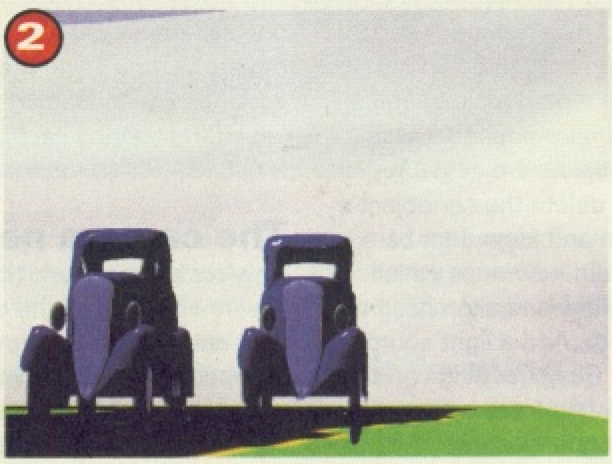
When you have finished positioning the camera, you can then render your final race and with a bit of luck, it will look very similar to a real televised race – if not, you'll need to spend a bit more time watching TV to see just how a professional director would position and cut between his cameras.■

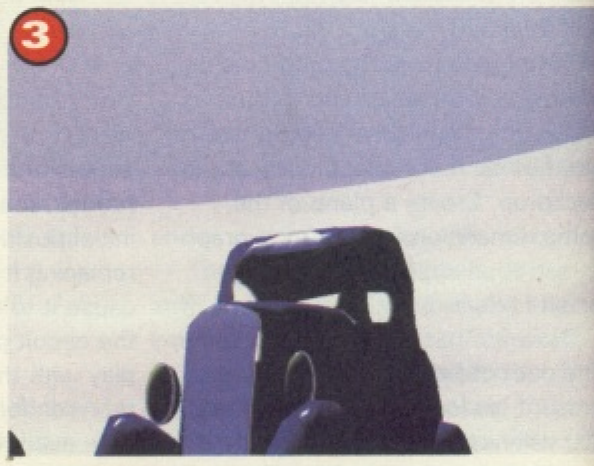
John Kennedy



▲ ...to this, to make sure the camera instantly moves from one site to another.











▲ "They duck, they dive... and they even weave – but the most important aspect is the camera never leaves them. Even better than that, the camera position changes which gives a professional 'cut' from one scene into the next".

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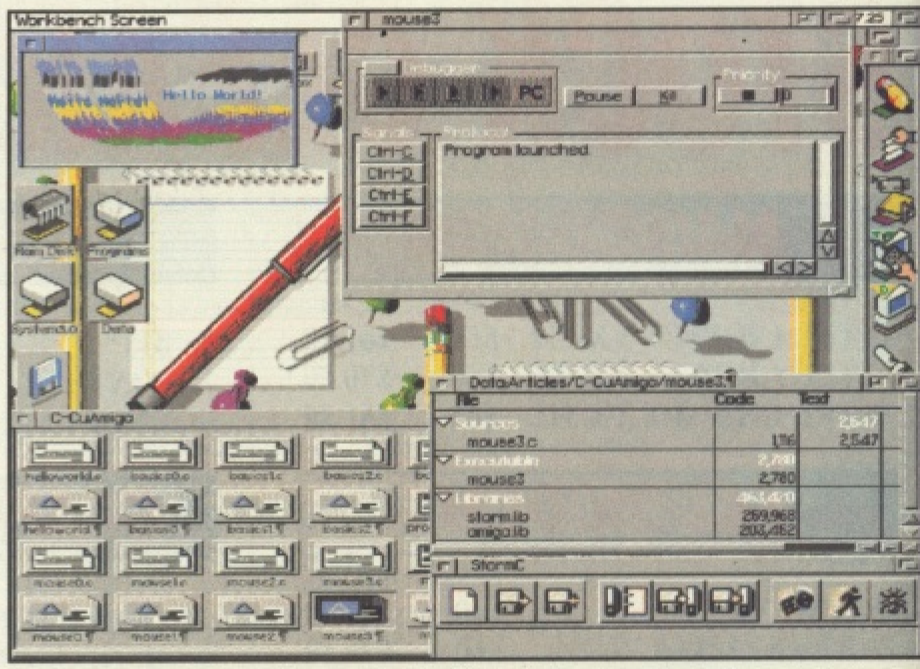
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Amiga C Programming

PART 2

This month we're going to look at making use of the mouse, giving a taste of an important OS process...



▲ **Once you get the hang of controlling Intuition you'll realise why the Amiga is the best platform around for programming.**

Interprocess communication is a grandiose term that describes a simple but powerful idea: it's a mechanism that let's programs pass messages (or little lumps of data) to each other.

Communication is needed between your program and Intuition when the user interacts with the GUI, and this happens through IDCMP (see box on opposite page) via a special port attached to each window. In fact, we've already done some trivial message handling: the WaitPort() call in last month's examples waited for an IDCMP message to arrive. In this case, the only message received was due to the user clicking the close gadget, as that was the only one we asked to hear about (using the WA_IDCMP tag when the window was opened).

Our first leap forward is to ask to hear about the user clicking any of the mouse buttons, by including the IDCMP_MOUSEBUTTONS flag in the data for the windows WA_IDCMP tag. Next, we need to differentiate between IDCMP messages arriving for our attention. If you're observant, you'll also notice we've sneaked in WFLG_DRAGBAR on the WA_Flags tag, so you can now move the window around!

In the first example, mouse0.c , we've separated this message handling code into the function handleIDCMP(), which takes a pointer to our window as an argument. The key part of the new code is the familiar call to WaitPort(),which waits for message arrival, together with the new GetMsg() call which extracts those messages. The general scheme is shown below (though some of the necessary type casts are omitted). See example 1.

The call to WaitPort() puts our program to sleep until a message arrives for it from Intuition. We've asked to hear about mouse button presses and the close window gadget being clicked, so those are the only messages we'll receive. In practice, after each call to WaitPort() many IDCMP messages could arrive, so we need a loop to get every message. The function GetMsg() returns NULL if there are no more messages, and this will end the 'while' loop.

Nested assignments

The assignment to intuimsg within the parenthesis of the while is a common idiom. This month's examples make big use of this: even the assignments to the library base variables are now nested in the 'if' test. Unfortunately, it looks like an equality test to those unfamiliar with C's strange syntax (remember the assignment operator is =, but the equality operator is ==).

There are a couple of issues here: the value used as the condition for the if is the result of the assignment (i.e., the value of GfxBase after the assignment is performed), and NULL is the same as false, with any other result representing true. So, the two fragments of code in the above example are equivalent. This idiom is often used as it can lead to much more concise code (it can help increase readability, but not always!). Returning to the while loop, we see it sets up intuimsg on each iteration, and the loop is executed until GetMsg() returns NULL (i.e., until there are no more IDCMP messages waiting to be dealt with). Interestingly, this is one of the cases where the use of the assignment within the while makes for much simpler code (why not try some alternatives that achieve exactly the same effect as this code, but without the nested assignment).

Moving on to the body of the innermost while loop: if we actually get a real, non-NULL message returned from GetMsg() (and hence, assigned to intuimsg), we must remember to call ReplyMsg() when we've finished looking at it. It's usually best to do this just before looping to get the next message, which is what we do in this example. If you don't remember to call ReplyMsg() on each message you get from GetMsg() then the whole Intuition system could lock up, and the user can no longer operate any windows or gadgets! So, last month's warning about resources applies to IDCMP messages: it's vital that your program handles them properly.

The main part of the body of the loop (i.e., the bit before the ReplyMsg() call) is shown below. This time we need to explicitly check for the user clicking the close gadget on the window, since we're accepting other messages too. The type of an IDCMP message is stored in the Class element, and it's usually one of the IDCMP flags used with the WA_IDCMP tag in the OpenWindowTags() call, as it is in this example.

If we get an IDCMP_CLOSEWINDOW message, set going to FALSE – so the main message handling loop will stop on the next iteration, then the program will come to an end. On the other hand, if we get an IDCMP_MOUSEBUTTONS message (i.e., if the user clicks one of the mouse buttons), we set the current drawing position to be the current mouse position, then draw the text in the window at that place. The mouse coordinates are stored in the MouseX and MouseY elements of the IDCMP message.

Country mouse

Try out this first example, you'll soon find problems. It only draws when the mouse is clicked (i.e., press down or release button), and you can draw all over the window borders. We'll tackle the former in this next example, by making it draw only when the mouse is moved with the left mouse button down.

The first difference in the second example, mouse1.c, is the addition

Trial and error

No, not a comment on the UK judicial system, but the name for a process which can help you learn things. Try out your own modifications to the examples and investigate what they do. You can always return to the real example if you get in a mess or stuck.

Intuition

Intuition is the name given to the collection of components of the user interface including the mouse, menus and windows. The programmer's access to the facilities offered by the Intuition system is through the intuition.library, which is stored in the Amiga's Kickstart ROM.

Layer

A layer is a rectangular drawing area. One layer can overlap another, and the parts that are seen are dictated by the layers' display priorities. If you're happy with the concept of a window then you might like to think of a layer as a very simple window. In fact, every window has an associated layer.

of flags in the OpenWindowTags() call to ask to hear about mouse movements, not just mouse clicks. This requires the IDCMP_MOUSE-MOVE flag to augment the windows WA_IDCMP tag, and the WFLG_REPORTMOUSE flag to add to the WA_Flags tag.

The major change is the switch statement of the handleIDCMP() function. Here we must handle the new message we might receive – IDCMP_MOUSEMOVE. We must also detect the left mouse button being pressed and released. The IDCMP_MOUSEBUTTONS message holds information on which button is pressed in the Code element, and we want to find SELECTDOWN or SELECTUP values there (most Amiga set ups are right-hand biased, and the select button is the left mouse button). If we detect the button was pressed down, we set the variable drawing to TRUE, and if the button has been released, to FALSE. We'll use drawing to control whether we draw the text when told of mouse movements.

The new IDCMP_MOUSEMOVE message indicates that we should do the drawing made in the previous example, but this time only if the drawing variable is TRUE (which it is only when the select button is pressed). As the comment nearby suggests, omitting the break from the previous case will make that case fall through, meaning this drawing code will be executed when a mouse is clicked as well. In some ways it gives a nicer feel to the program as you'll get a visible response as the mouse is clicked, rather than only after it's moved. Compile the program both with and without the indicated break statement and try to spot the difference in the behaviour.

Borderline

Now the program reacts to mouse movements we can concentrate on stopping it drawing over the window borders. Many solutions are given in the examples. The simplest is to refresh the window frame (after drawing over it) using RefreshWindowFrame(), as in mouse2.c. As well as being simple, it's also a bit inefficient: the whole frame needs to be redrawn on every mouse move. Also the window borders may appear to flicker. So, while it's the least work (in terms of code), it isn't the most desirable solution.

Other solutions

Another solution is to make the window a GimmeZeroZero window, using a WFLG_GIMMEZEROZERO. This has a little more code overhead, since it also involves getting the mouse coordinates indirectly from the window, rather than straight from the IDCMP message (see mouse3.c). This is inefficient too, since the internal part of the window has to be made from a separate lump of memory (or layer).

Half-way house

A half-way house solution is to calculate whether the drawing will hit the borders, and clip it (or not draw it at all). For our example, this would require us to calculate the width and height of the text. As clipping the text is complicated and not drawing it is silly, we won't pursue this possibility. For our example the best solution is to set-up a clipping region inside of the window, so all drawing will be clipped and avoid the borders. This requires us to use functions from another fundamental part of the Amiga Operating System: the Layers library. The code in mouse4.c builds on the simple resource management structures we've seen many times before.

You may see some 'change the colour of the drawing' code in later examples, just to make them more interesting. Use this as a base-point to make your own alterations... And have fun experimenting! Next month we'll be moving on further still. ■

Jason Hulance

IDCMP

Intuition Direct Communication Message Port (IDCMP). This is the principal method of communication the Intuition system uses. IDCMP messages are sent by Intuition to a message port connected to a window. These messages give information about such things as activation of gadgets, selections from menus, changes to the window size or position, and key presses and mouse movements.

Code examples

Example 1:

```
/* Loop, waiting for messages, until the close gadget clicked */
while(going)
{
  /* Wait for messages to arrive */
  WaitPort(win->UserPort);

  /* Messages have arrived: loop through all of them */
  while(intuimsg = GetMsg(win->UserPort))
  {
    /* Act on this message... */

    /* Reply when finished with message */
    ReplyMsg(intuimsg);
  }
}
```

Example 2:

```
/* These two lines... */
GfxBase = OpenLibrary("graphics.library",36);
if(GfxBase != NULL)

/* ...do the same as this single line: */
if(GfxBase = OpenLibrary("graphics.library",36))
```

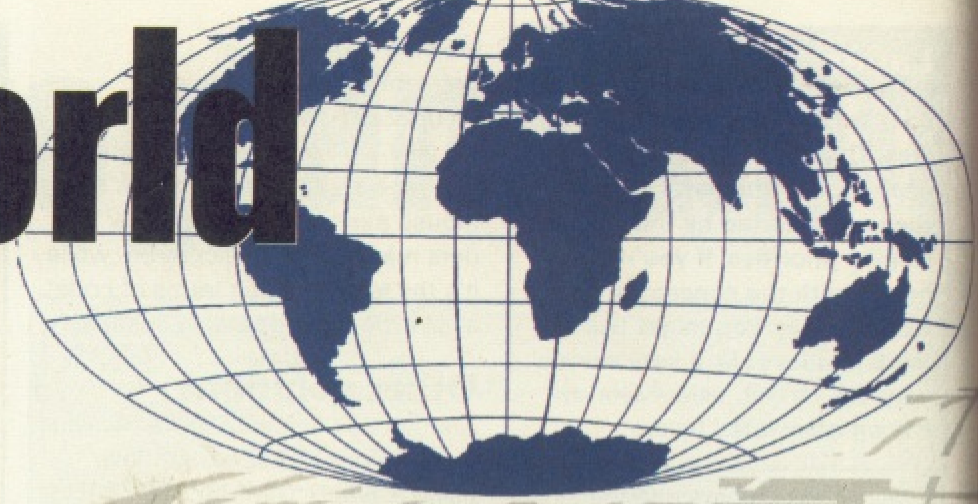
Example 3:

```
/* Act on this message... */
switch(intuimsg->Class)
{
case IDCMP_CLOSEWINDOW:
  going = FALSE;
  break;
case IDCMP_MOUSEBUTTONS:
  Move(win->RPort, intuimsg->MouseX, intuimsg->MouseY);
  Text(win->RPort, text, strlen(text));
  break;
}
```

Example 4:

```
switch(intuimsg->Class)
{
case IDCMP_MOUSEBUTTONS:
  switch(intuimsg->Code)
  {
  case SELECTDOWN:
    drawing = TRUE;
    break;
  case SELECTUP:
    drawing = FALSE;
    break;
  }
  /* Omit the break to draw on click, too */
  break;
case IDCMP_MOUSEMOVE:
  if(drawing)
  {
    Move(win->RPort, intuimsg->MouseX, intuimsg->MouseY);
    Text(win->RPort, text, strlen(text));
  }
  break;
case IDCMP_CLOSEWINDOW:
  going = FALSE;
  break;
}
```

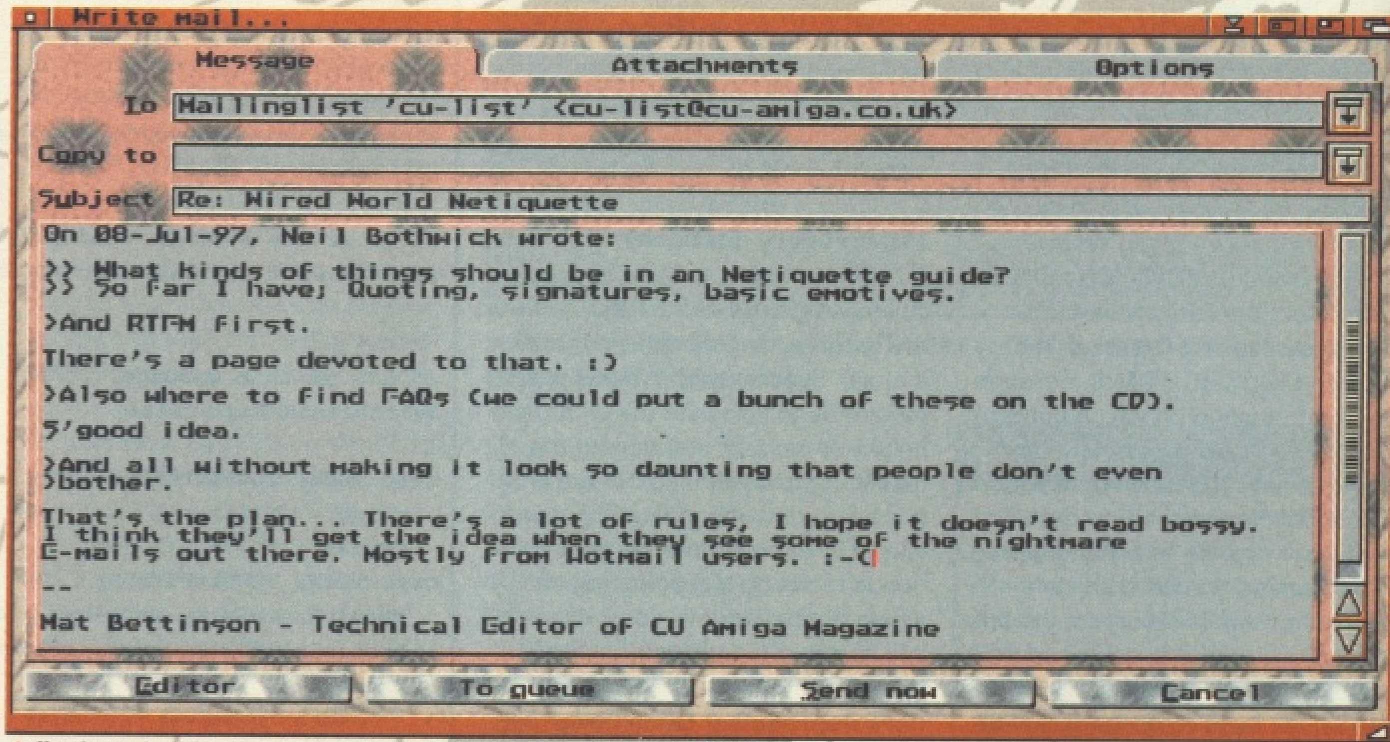
Wired World



How many rules about the Internet aren't written down? This month we're giving you some instruction on 'Netiquette', the art of being a good Net citizen.

Most of what's referred to as Netiquette relates to the writing of E-mail and making Usenet postings. It's important to note that there are no hard and fast rules here, this is just a guideline on what kinds of things are considered good mannered and likely to put across your words in the right light. There's also some classic mistakes easily made.

We'll start with the basics; writing an E-mail to someone privately is a fairly easy thing to do. We press new message in the E-mail client and type our text. A very common oversight is to neglect to configure the 'signature'. E-mail packages treat this differently and you may never see it yourself. It's a special bit of text that's appended to the bottom of every E-mail. Normally it's quite short with just your full name, address and possibly your personal home page location.



▲ Here's an example of an E-mail quoting relevant sections of the original so that we can reply underneath.

Small Signature

They'll be a special place to set your signature, take time out to compose a short and good looking one. Now, write an E-mail to yourself. That's right, put your own address in and E-mail yourself. What you see is exactly what others are going to see. This simple little step goes a long way. You'll also see instantly if there's anything else strange by trying to reply to yourself.

When replying, the E-mail client will quote the entire E-mail back to you. Basically a '>' will be stuck on the front of every line. It means that, "You said this" and you write underneath the quoted text so that it means, "You said this so I said this...". Simple but it's amazing how many people write their response at the top of the text with the whole previous, quoted, E-mail written underneath. It's lazy and shows that the writer doesn't know a hell of a lot about how to write E-mail.

So what we do is cut out everything we aren't specifically replying to. The first thing that needs cutting is the line their E-mail client might put in at the top such as "On Monday you wrote...", we don't need that. Mark it and Amiga-X to cut. It might be a different hotkey on your E-mail client, whatever it is, learn the key combination as you'll use it a lot.

Now the only thing left is the statement that we want to reply to, so we leave a blank line underneath then type our response. This may be all that's required, but if they wrote a fairly lengthy E-mail then later on there may be some more bits of quoted text – accompanied by inserted responses. It is better form to slightly edit the quotes and address each of their points straight after they said it rather than to include all of the points and type underneath. Alright, so there might be a bit more work involved but it does make for an E-mail that's a whole lot easier to read, more like an actual conversation.

Common Netcronyms

RTFM	Read The Flippin' Manual
FAQ	Frequently Ask Questions
IMHO	In My Humble Opinion
FYI	For Your Information
BTW	By The Way
RSN	Real Soon Now
LOL	Laughs Out Loud
ROTFL	Rolls On The Floor Laughing (yes, it's common)
MCIBTYC	My Computer Is Better Than Your Computer

External Editor

Be sure that your line lengths are wrapped at around 80 characters and that you aren't creating huge long lines. E-mail clients such as Microdot II, in the Netconnect package, and the popular freeware 'YAM', have built-in editors and they also have the facility to activate an external text editor. If you use, for example GoldED or Cygnus Ed, to write a lot, you might like to use it for E-mail too. You can configure this in virtually any E-mail package, take time when you read through the provided documentation..

YAM, in particular, has a big problem of producing huge line lengths. The author doesn't think this is a problem but there is a workaround involving adding a line to YAM's configuration file. It might be easier just to use a proper text editor, which you'll find most die hard E-mail heads do. So now let's have a look at the perfect E-mail response;

```
Hi Jerry,
```

Common Emotives

`:-) :) 8-) 8)`	**Forms of happy 'smileys'**
`:-( :( 8-( 8(`	**Forms of sad 'frownies'**
`:-|`	**Straight faced, annoyed**
`3:-)`	**Devilish grin**
`:-P`	**Sticking tongue out, making fun of**

```
> Were you thinking of coming
over on Saturday?
> Yeah, I'll be there. Make
sure you have Worms ready. :)
> I'll make sure there's plen-
ty of coffee.
> Good, I'll pick up some milk
on the way. See ya then!

Joe Bloggs - Die hard Amiga
fanatic - joe@bloggs.u-net.com
http://www.bloggs.u-net.com
```

This E-mail is tiny and straight to the point. Only what is relevant was quoted, the response directly underneath the relevant statements. The original might have had that all on one line so a break would have been inserted and another '>' put in by hand. A lot of people don't actually bother with this for private mail, it becomes quite important for mass mail though.

Mass mail means E-mail that many people will see. This can either be a Mailing List or Usenet news. A mailing list is where one person writes to a specific address and it goes out to lots of other people, sometimes thousands. For such an event, the art of minimal quoting becomes supremely important.

Smiley's

In the thousands of years that people have been writing letters, no one came up with an idea on how to convey specific emotions. It took E-mail to kick off the use of emotives. These are little symbols meant to convey feelings such as being happy, sad, angry and so on. The simplest is a smiley which looks like this; :) Looked at sideways you can make out two eyes and a smiling face (or that's the idea anyway), and there's plenty of variations but they're not written down anywhere. Largely someone will look at a smiley and figure out what emotion goes with it. :- (is obviously someone looking sad, unhappy and so on. Here's some examples;

```
So I got it for free :)
Unfortunately it broke :(
```

Some people will say there's lots more that mean different things, in my experience unless they're obvious, they are often open to misunderstanding. Overuse and over inventive emotives can get away from the point. There's a table of some fairly common ones included here – but again it's a guide, and not a rule book.

There's some other aspects loosely grouped under Netiquette and they refer to conduct inside public forums. One heard repeatedly on the Net is 'RTFM'. This stands for "Read the Flippin' Manual". Since there's been a steady rush of newcomers to the Net for years now, existing inhabitants get tired of answering the same questions. They really don't like it when people ask questions that could have been answered by reading the manual, scanning the Newsgroup/Mailing list/IRC channel back a ways.

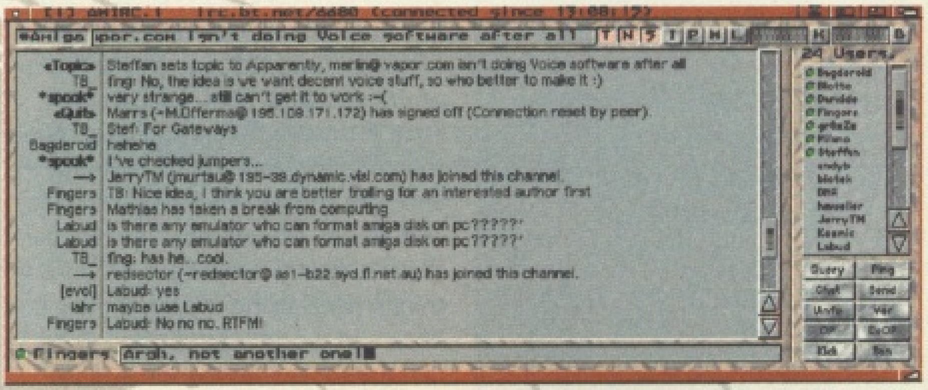
Read the FAQ

There's also the FAQ or Frequently Asked Questions. Many groups will have one of these, if there is one, reading it before asking a question is the only acceptable form. As an example of the cardinal unpleasant posting; someone replies to a Usenet post, quotes the entire mail, writes at the top in upper case letters (considered shouting) "YES BUT HOW DO I GET A ROM?!?!" and at the bottom, way past all the quoted text is a massive banner which is supposed to be the signature. If you think this is a tad extreme – believe me, you will see it.

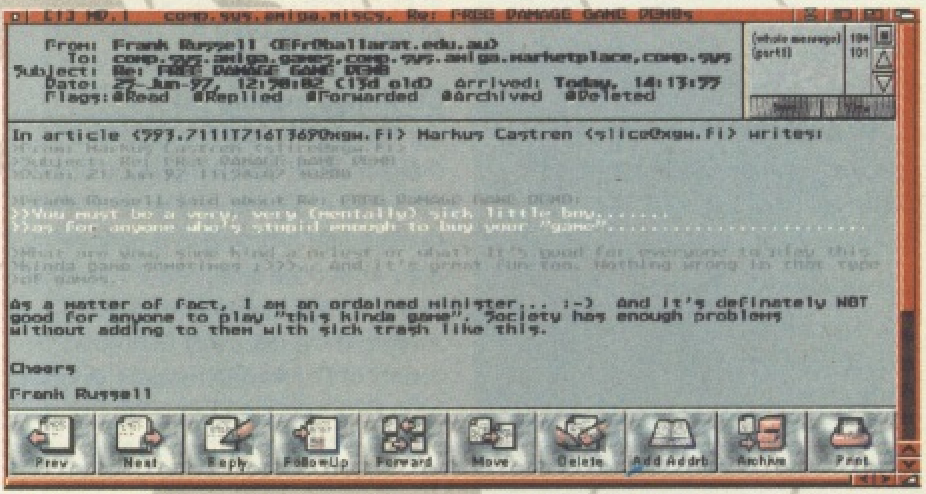
Most of the suggestions made here stem from common sense and can be picked up by performing the single greatest item of advice we can give. Before you send your E-mail, read it. Ask yourself what others are expected to reply and whether the recipient(s) will find this a worthwhile bit of text to read. To sum up the rules; Don't make lots of spelling mistakes and typos, use correct punctuation, never type a message all in upper case, make sure the question hasn't been answered in a FAQ or recently in the group, use minimal quoting and a small signature. Also, always assume people are going to take your E-mail the worst way possible.

Emotives or not, it's pretty easy to misunderstand plain text but hopefully this guide will help you understand the common ground. Sounds like a heck of a lot of nasty rules and regulations but they have evolved with the specific intention of making it much easier and much more fun to communicate in E-mail land without any serious misunderstandings. If there is anything specific you'd like to see in next month's Wired World, then don't hesitate in dropping an E-mail to mat@mats.net ■

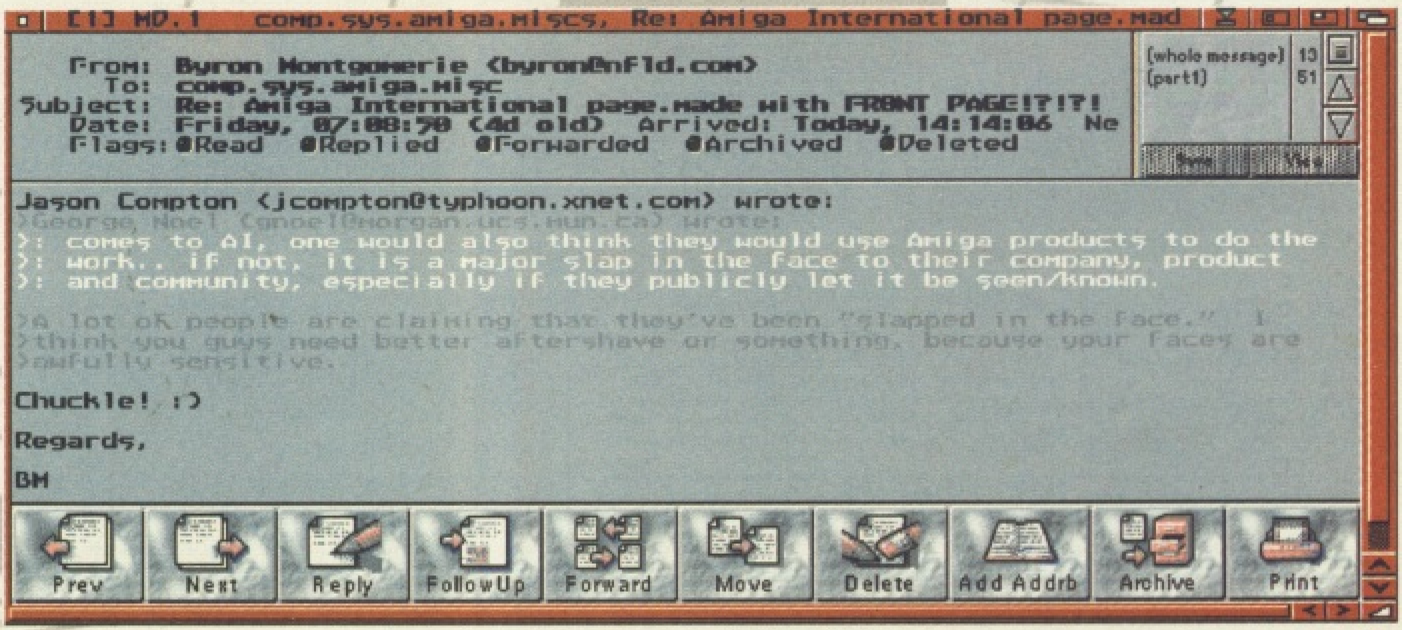
Mat Bettinson



▲ **Witness the frustration of these contributors to the #Amiga IRC channel as another person arrives repeatedly asking often answered questions.**



▲ **Here's a well composed Usenet reply, quoting the specific relevant passages from the previous postings in the thread.**



▲ **Classic nightmare Usenet post. Quotes a post purely to say 'I agree' or 'that's funny'. Why?**



Surf's up!

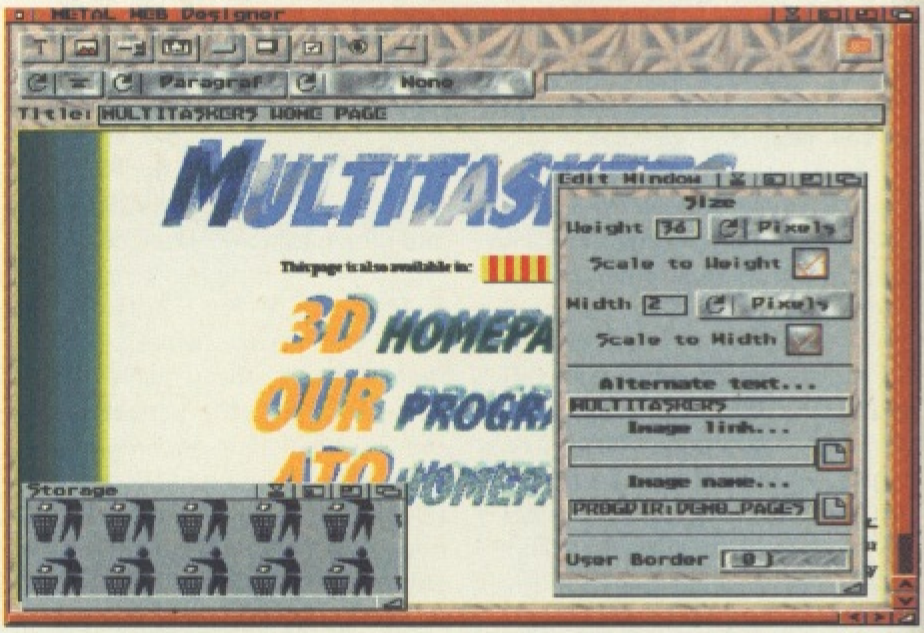
This month, news of a WYSIWYG HTML editor, a brand spanking news reader and a CU Online overhaul.

Net God Speaks

Recently some bright spark on comp.sys.amiga.misc noted that Amiga International's page was done with Front Page, a PC application. There's a camp of people who thought this was terrible and that it should have been done on an Amiga. I can see that argument but currently there isn't an Amiga WYSIWYG HTML editor like Front Page on the PC. Until Metal Web arrived, that is. However, Metal Web is only at the start of the complex issue and it's not perfect. It wasn't long before lots of Amiga users were slating it for not being Front Page on its first beta release. For Pete's sake, be reasonable. It's being worked on and maybe *one* day someone might use it instead of the PC application, so a bit of support and understanding might be in order!

Metal Web

The Amiga has long been lacking a WYSIWYG HTML editor and the Spanish 'Multitaskers' decided to address this with Metal Web. Metal Web is a true WYSIWYG web page development environment with a MUI interface making extensive use of drag 'n drop. Text, images and such forth can be dragged around in the window, font sizes set, images and text edited within the package and so on. The current 1.0 beta certainly shows promise even if a few things need fixing. It already has the basics of a pretty hot package. You can get more information and the latest version on the Multitaskers web site at `http://www.redestb.es/personal/multitaskers/`



CU Amiga mailing list

For those who didn't know, and that's a lot of you judging by our E-mail, CU Amiga operates an E-mail mailing list. It provides a chance to hear about the latest developments in the Amiga scene and on CU Amiga. It's a relatively low noise forum of CU Amiga readers to offer feedback and criticism of the magazine. It's also an excellent resource of technical hints and tips, troubleshooting and so on.

The full instructions can be found at the bottom of the Editorial section of CU Online, otherwise to subscribe send an E-mail to **`listserv@cu-amiga.co.uk`** with 'ADD cu-list' as the sole line in the body of the E-mail. We hope to see you there!



CU Online overhaul

CU's web site has had a major overhaul, yet again. There's now lots of news, features, points of view, art galleries, links to Amiga pages, CUCD problem addendums and much more. You can also find more information on Project XG.

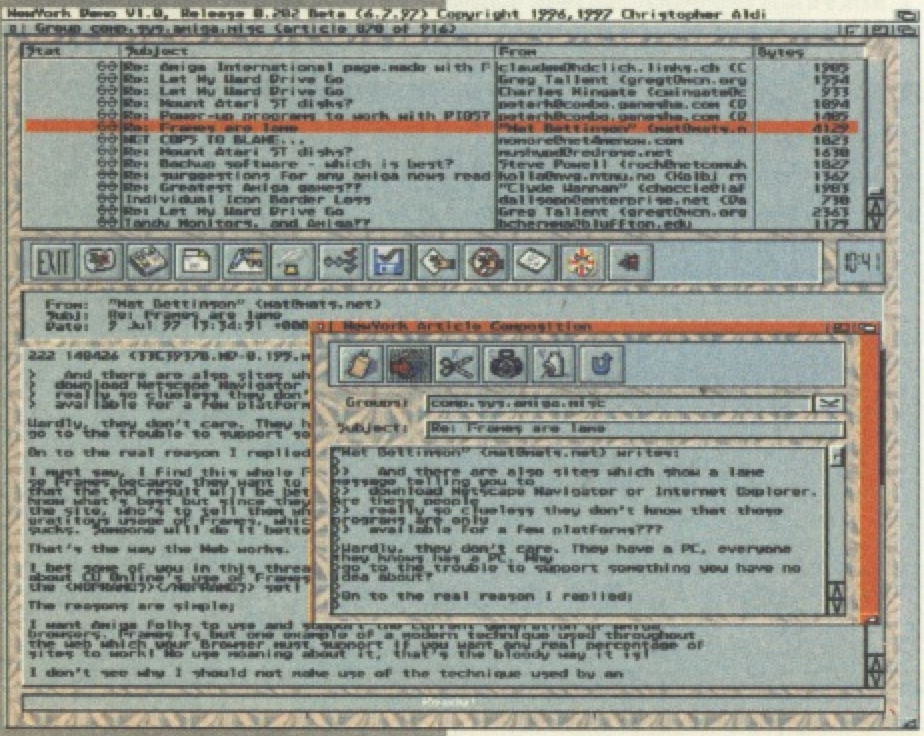
We're serious about CU Online and we hope that it shows. The idea is that CU Online is an invaluable Amiga resource and that it isn't just a shallow front for the magazine. We hope that you're all going to drop in on a regular basis in order to have a look at what's new, so be sure to place the following address **`http://www.cu-amiga.co.uk`** in your bookmarks! Oh and don't forget you can now also take out subscribtions online.

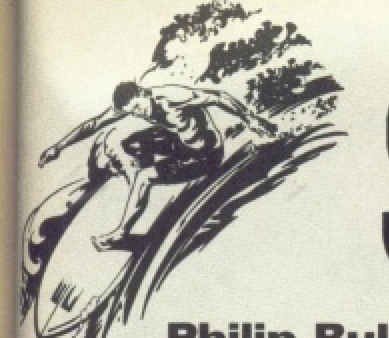
NewYork released

The long rumoured ClassAct based newsreader, New York, has finally arrived at long last – featuring a hierarchical newsgroup listing in the subscriptions window, but strangely not in the reader, at least in the demo version that is.

In addition New York also manages very fast news downloading, browsing and navigation, plus it even manages to support mass decoding of split binary encodes such as found in alt.binary. There's a demo available from ftp.finale-dev.com/pub/NewYork/ and the full version costs $35 US.

Do remember to keep a look out for a review of this promising package in next month's issue of CU Amiga. If it's some further information you require, then you'll be able to find it at **`http://www.finale-dev.com`**





Surf of the Month

Philip Bulley takes to the Net to bring you another collection of Web sites with a distinct Amiga Bias.

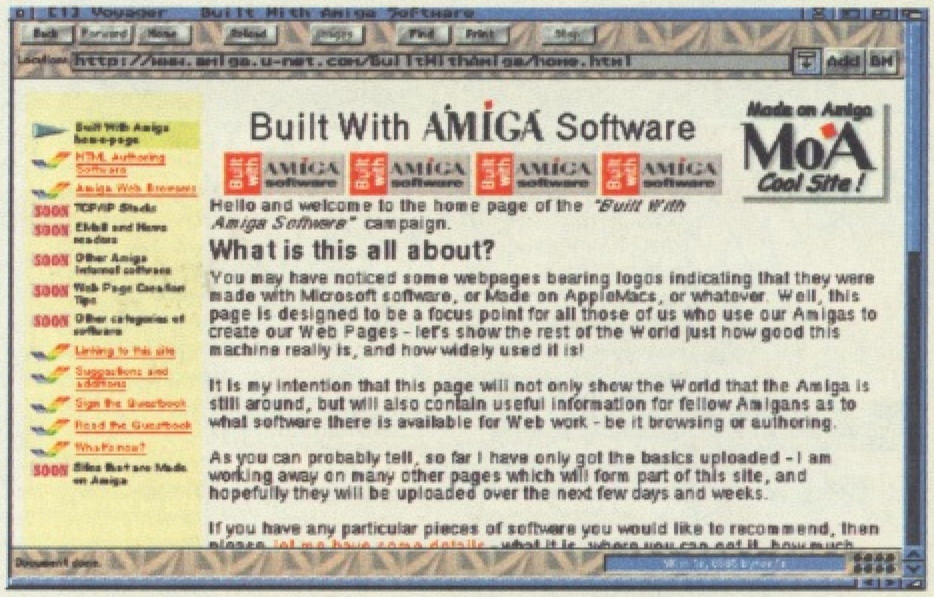
If you can cast your mind back to the January 1997 issue of CU Amiga, you'll remember we gave you the chance to win lots of goodies in our 'Ultimate Amiga Trainspotter Quiz', and Ben Hutchings of Reigate, Surrey, grabbed the prestigious title with his hands behind his back.

Ben – a man of many talents, has a dislike for Bill Gate's Microsoft Corporation and to show the rest of the world his disgust for the "Windoze" giant, he has created an **Anti-Microsoft** site which claims Microsoft have lied and cheated their way to the top. He has even spared a thought for the people who hate (or like) Mr. Gates so much that they'd like to meet him face to face, by giving directions to his home in Washington. Ben has also included a few links to other MS-Hate pages, made by like-minded people.

If like Ben, you're sick of Microsoft and their domination of the internet, you will probably feel its time to fight back, by helping the Amiga get back into the spotlight (if you don't, you're reading the wrong magazine!). As I know that you do want to help, you might like to surf on into the **Built With Amiga Software Campaign** site. This new site intends to show others that the Amiga is still around, by containing a wealth of information on internet software, whether it be for browsing or authoring. It also caters for Amigans who want to show the rest of the world that PC made sites aren't the only places where little animations tell you how the site was created, by presenting a nice collection of its own for you to use on your personal homepages.

When you have chosen an animation to place on your homepage, you might like to know who actually sees it. Well lucky for you, the boffins at FXWeb could have just what you're looking for. **WebTracker** is a web counter with a difference, not only does it count the hits your homepage recieves, but it also collects information on what browser they are using, and the OS that they are running.

WebTracker will happily keep a statistical record to show you how popular your website is on certain days of the week, and hours of the day. Plus, it will tell you the percentage of visitors who visit once only,



▲ **This site has a wealth of info on Net software.**

or whether they feel that your site is of such high quality, that they are enticed to return.

Now switching to something completely unrelated – if you happen to be wondering which is the best Aminet CD so far, you'll be able to find out at the **Official Weird Science Reviews** site. Along with the Aminet CD reviews, you'll also see reviews of other Weird Science titles, including Assassins 3 and In-To-The-Net. When you've finished reading the reviews, you can enter their CD prize competition.

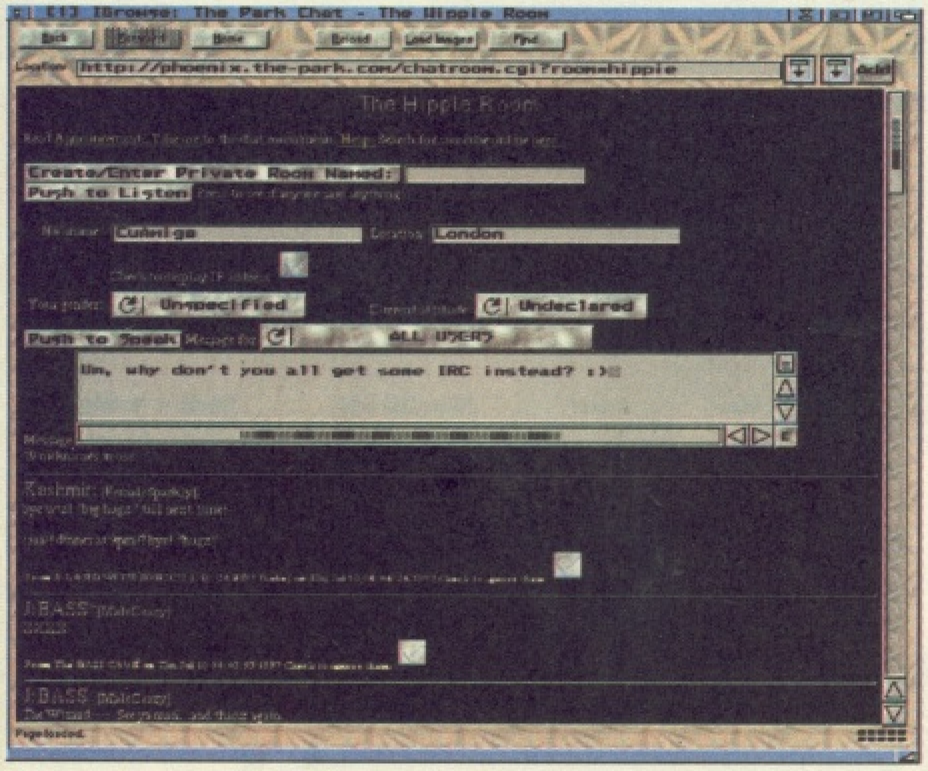
Incidentally if you happen to win a game which you can't complete, you may be interested in the next site. Whether you need a complete solution to Simon The Sorcerer, or just need to know where Chaos Engine's secret exits are located, Ami Cheat's should be able to help you. **Ami Cheat's** is a huge collection of tips and cheats for hundreds of Amiga games which the author has been collecting for the past ten years. At the time of writing this feature there were words of wisdom for 1,208 Amiga games on-line.

The site is designed in an easy to use fashion, and every page has an alphabet stream at it's base, linking you to an index of all the games titles beginning with that letter. If you can't visualise the sheer number of games titles on this site, you can call up an entire index listing them, but beware, this may take a while.

Still, if you're so bad at games that even the cheats can't help – and you just happen to have your frames-capable browser up and running, try Web chat. **The Park** is a site which hosts various chat rooms that cater for most interests.Unlike other Web chat sites, it doesn't auto-refresh itself. This could be annoying for users with lazy fingers – having to constantly click a button to recieve the latest messages – but the advantage is you'll get new messages only as you want them and not when your browser does.

As well a personal meeting service this site encourages all ages to take part, with a special centennial room for people who've already recieved telegrams from the Queen. Unfortunately, a small section of this site utilises Java Script, but this shouldn't be a problem for Amiga users. Happy surfing! ■

Philip Bulley



▲ **Something for everyone on 'The Park' web chat site.**

Those sites in full

Ben Hutchings' Anti Microsoft
http://users.ox.ac.uk/~worc0223/anti-ms/index.html

Built With Amiga
http://www.amiga.u-net.com/BuiltWithAmiga/home.html

Web Tracker
http://www.fxweb.holowww.com/tracker/

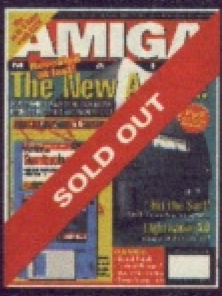
Official Weird Science Reviews
http://www.pisle.com/amiga/index.html

Ami Cheat's
http://www.netrover.com/-timt/amicheats.html

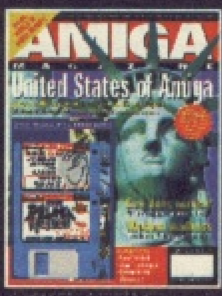
The Park
http://www.the-park.com/

Back Issues

After an Amiga program, article, game review, tutorial, feature or maybe a news story? Well look no further as they're all here...



MAY 1996
Disks: Soundtracker Pro II, MIDI Sequencer demo, Alien Breed 3D2 demo
Features: Free Amiga music book, the new Walker, Amiga Surfer pack and the quest for Amigas
Inside: Lightwave 4, Slamtilt Pinball, Tracksuit Manager 2 reviewed



MAY 1996
Disks: Termite demo & The Killing Grounds demo, plus 96 page net & comms guide
Features: Escom sells Amiga Technologies, publish your music
Inside: Modem round-up, Total Football & new Timekeepers disk reviewed



JULY 1996
Disks: XiPaint & Primal Rage demo
Features: A special report on what's happening in Europe, & news on Visorp & Pios
Inside: Image FX 2.6, Surf Squirrel, A4000 Tower, Primal Rage, SWOS Euro and more reviewed.



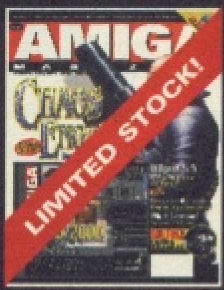
AUGUST 1996
Disks: EasyCalc (full program) & Valhalla III demo.
Features: The future of the Amiga with VIScorp, the new PIOS machine and the second part of the Euroscene feature.
Inside: Siamese Twin, Photogenics 2.0, Valhalla III and Tin Toy reviewed.



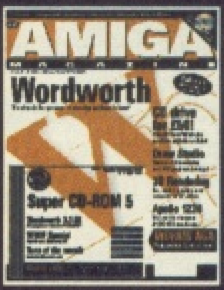
SEPTEMBER 1996
Disks: Vista Lite (full program) & a demo of Brian Lara Cricket '96
Features: The Aminet exposed. All 6 gigabytes!
Inside: Final Writer 5, OctaMED SoundStudio, Atapi CD-Rom drive. Plus an exclusive preview of the new AGA Worms.



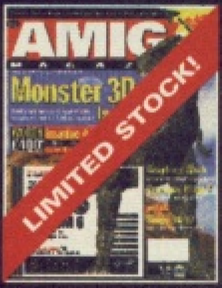
OCTOBER 1996
Disks: Upper Disk Tools: ideal for sorting out those awkward disks and drives!
Features: The Amiga in America, Net software...
Inside: The speed issue, or something. Three top accelerators, a TCP/IP stack comparison & Capital Punishment



NOVEMBER 1996
Disks: XCAD 2000 - The premier 3D CAD package, plus Chaos Engine 2. CD-ROM or floppy edition
Features: Palmtop Amiga-Psion link-up
Inside: Opus 5.5, Delfina DSP sound card, Web Browser War, Alfa Quatro, CD-ROM writer



DECEMBER 1996
Disks: Wordworth 3.1 SE, Worms demo. CD-ROM or floppy edition
Features: CD-ROM drive for £50! Amiga and PC games on CD-ROM
Inside: Draw Studio, Apollo 1230, Storm C, Siamese RTG system, Tiny Troops



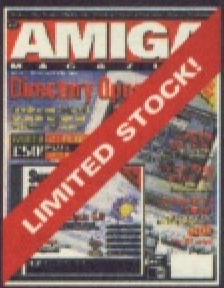
JANUARY 1997
Disks: CD-ROM or floppy edition, Imagine 4.0, Underwater Capers, plus over 100Mb of Imagine extras on CD
Features: Get a job in graphics, plus Imagine 4.0
Inside: Art Effect, PPaint 7, SWOS 96-97, Fighting Spirit, Chaos Engine 2 ...



FEBRUARY 1997
Disks: Design Works, Minskies Furballs plus Worms – the Director's Cut extras and Imagine extras on the CD.
Features: The new A/Box
Inside: Wordworth 6 Office, Turbo Calc, Minskies Furballs, Bograts reviewed.



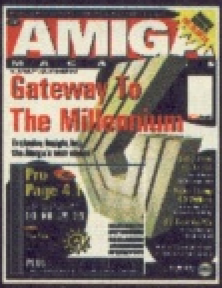
MARCH 1997
Disks: OctaMED SoundStudio (full program) Chaos Engine 2, Chaos Engine 2 AGA demo
Features: Turn your Amiga into a pro studio. Printers: problems solved.
Inside: Quickcam, Cybervision 3D, SMD 100, JetPilot reviewed



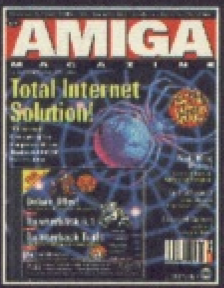
APRIL 1997
Disks: Directory Opus 5.11 (full program). Tiny Troops demo
Features: Build your own Tower Amiga Part 1. The 50 best Amiga Games
Inside: Massive Cinema 4D 3.0 Review, new DTP series, ProGrab Sampler, Teletext Decoder



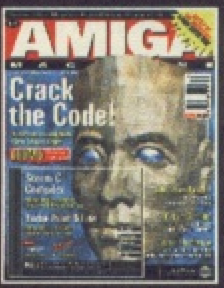
MAY 1997
Disks: Image Studio (full program) Kargon RPG, exclusive clipart on CD
Features: The Future's Bright: Gateway buys Amiga! Tower Amiga Part 2.
Inside: PageStream 3.2, Big Red Adventure, LightWave 5, Epson Stylus 600...



JUNE 1997
Disks: Pro Page 4.1 (full program) MPEGA 2.4, Sysinspector, The Sun game & more!
Features: CD-R for Amiga – cut your own CDs for a few hundred pounds plus Tower Amiga Part 3: Zorro.
Inside: Turbo Print 5, Net Connect, Cybervision...



JULY 1997
Disks: Free Net software, Quarterback 6.1 inc QB tools, Big Red Adventure
Features: Total Internet Solution, the history of the Amiga & a look at Amiga artist, Eric Schwartz.
Inside: Final Writer '97, Siamese RTG 2.0, Burn It...



AUGUST 1997
Disks: Dogfight, Turbo Print 5 Lite, Storm C Compiler
Features: Power PC is coming, Crack the Code, plus Power Gaming
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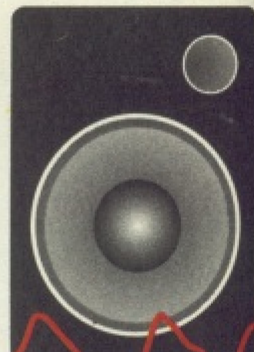
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Sound Lab

Making Music with Project XG



On page 24 we tell you how to make it. Now we tell you how to get the most out of Project XG, the most revolutionary Amiga audio add-on ever!

With Project XG attached to your Amiga you have an extremely powerful and flexible music system at your disposal. Considering its minimal manual controls, it's important that you get a good understanding of just what is inside that neat little box. Once you know what makes it tick, you'll soon find out how to make it go bang!

All about GM

In the past, one of the problems of distributing MIDI song files was that in order for a song to playback 'properly' on any music system, it needed the system to have the same instrument sounds as the system the songs were composed on. With many differing systems, it was next to impossible to audition a song without first having to change instrumentation or spend hours tediously tweaking sounds and settings.

Fortunately though, as with most problems, someone eventually finds a way to improve things. September 1991 saw the MIDI Manufacturers Association (MMA) and the Japanese MIDI Standards Committee (JMSC) adopt the 'General MIDI System - Level 1' specification (GM).

When used in conjunction with the Standard MIDI file format (SMF), GM provides a more compatible way to exchange music compositions from one system to another.

Standard MIDI files

Different hardware and software sequencers or trackers, generally, have their own format for storing song data. If you want to load a sequence from one program into a different program you need a specific export/import function or a conversion utility. The Standard MIDI File format was created to provide a standard file format that could be used to transfer sequences from one system to another.



▲ External controls on Project XG are limited, but everything can be remotely controlled from OctaMED or any MIDI sequencer, including effects and voice modification.

SMF supports three different kinds:
Format 0: Stores all MIDI data in a single track. It allows the simplest methods of playback and is the most commonly used.
Format 1: Adds the capability to store MIDI data separated into multiple tracks. This format is recommended for ease of modification.
Format 2: Allows the storage of multiple tracks and sequences.

Unlike common tracker and mod formats, SMF does not store actual sound data. It only stores MIDI information for triggering and controlling sound generation devices. One main advantage is a substantial reduction in file size.

General MIDI

At it's most basic level, GM provides a specific set of sounds assigned to specific MIDI program change and note numbers. These sounds are divided into two sections: instrument and percussion.

The instrument section allows musicians to put MIDI program change messages in song files to specifically select a particular sound on a GM device. This ensures a part intended to be played on piano is not played by a flute or other instrument. In this way, selecting patch/program number 3 and playing notes, will always produce the sound of an Electric Grand piano. GM provides for the selection of 128 instruments divided into 16 different groups or families (see Table 1). Instruments can be triggered on MIDI channels 1 to 9 and 11 to 16.

The percussion section contains 47 'drum' sounds assigned to specific MIDI note numbers 35 to 81 (see Table 2). Some GM devices extend this range to include additional sounds for the remaining note numbers 1 to 34 and 82 to 128, but these additions are generally device specific and not compatible across different systems. MIDI channel #10 is set aside for control of the percussion section.

There is no defined MIDI standard for keyboard octave relation. Some manufacturers number octaves from 0 to 10, others use 2 to 8 to refer to the same notes. A common problem related to this is that songs may playback shifted up or down one or more octaves. GM solves this by assuring that all patches will have a pitch of 440 Hz (A440) when playing MIDI note number 69.

GM doesn't define how sounds are to be generated. It is up to the hardware manufacturer to implement sounds that conform to GM, be it through analog, FM, wavetable, or monkey synthesis. So, an Acoustic Grand piano (#1) may not sound the same on a GM analog device as it does on a GM digital sample player.

In addition to instrument and percussion sound selection, GM implements other often used features of MIDI including: velocity, pitch wheel, channel pressure, controllers and registered parameter messages.
Velocity: Generally, velocity (part of the MIDI note message) controls the volume that a sound plays back at for each note (VCA level). Some devices may allow velocity to control other parameters, instead.
Pitch Wheel: Pitch wheels or pitch benders, as they are often called, offset the frequency that notes play back at. GM defaults to a range of 2 to +2 semitones, allowing frequencies to be 'bent' from the normal. Pitch bending affects all notes playing on the assigned MIDI channel.
Channel Pressure: This is the

Compatible software

Due to the pseudo MIDI connection, Project XG will work with a wide range of musical applications. These include all sequencers, such as Music X, Bars and Pipes, Dominator, Camouflage, Rave and Dr T's KCS. It will also work with OctaMED and OctaMED Sound Studio, even including the older versions of OctaMED that run on OS 1.3 machines. This is great news, as it means that if you currently use any of these packages, you can seamlessly integrate the stunning sound quality and creative opportunities of Project XG with your existing system.

Controlling Project XG from your software is just like controlling an external MIDI module via a MIDI interface. If you've never used any MIDI instruments before, check the documentation of your software for details on how to set this up. We'll go into specific details and examples of using Project XG with various sequencers next month. Users of Sound Studio (as cover mounted on the March 1997 issue of CU Amiga) can check out the brief and abruptly terminated demo tune file on the cover disks and CD of this issue. See the Demo Tune panel for details.

When you order your Yamaha DB50XG card (the heart of Project XG), you'll get a comprehensive manual which includes details of how to access each of the hundreds of parameters, and also lists of the General MIDI and XG sound banks.

Much of this information can seem overly technical at first but don't worry, we'll be demystifying the process of resonant filters and effects 'sends' over the next few issues of CU Amiga. For now, here's an introduction to General MIDI and XG.

amount of pressure or 'push' when playing a note on a keyboard. It is often applied to control vibrato (VCO level) or volume (VCA level). Channel pressure affects all notes playing on the assigned MIDI channel.

Controllers: The following MIDI controller messages are also supported: Modulation (1), Channel Volume (7), Pan (10), Expression (11), Sustain (64), Reset All Controllers (121) and All Notes Off (123). Channel Volume defaults to 90 (0 to 127) with all other controllers set to off or normal.

Registered Parameters: MIDI RPN messages are also supported: Pitch Wheel Bend Range (0), Fine Tuning (1) and Coarse Tuning (2).

GM requires devices (hardware or software) to meet the following minimum playback requirements;

24 Voices: A minimum of 24 voices are available for instrument and percussion sounds. Generally, one voice is required to playback one sound at one pitch. So, playing a single note, usually requires one voice. But, playing a 3 note chord would require 3 voices. So, if at a particular time you wanted to play several 8 note chords, you would be limited to a maximum of 3 instruments playing at once. Also, keep in mind that some devices may implement instruments with layered voices, so playing one note may require multiple voices. Some devices implement voice allocation specifically as 16 instrument voices plus 8 percussion voices.

16 MIDI Channels: Each channel can play a different instrument and can respond to separate MIDI controllers, pitch wheel, etc.

Although GM was a step in the right direction it was only developed as a "recommended practice" for use with MIDI, it was never intended to be a standard. Manufacturers such as Roland and Yamaha chose to build on GM, each offering their own enhancements to the General MIDI guidelines.

Roland GS

The first commercially available GM device was Roland's Sound Canvas. This device and those that came after it followed Roland's GS format. GS expanded on GM by adding more instruments to the percussion section and varied patches to the instrument section. Among other additions, it allows control of tuning, pan, level and reverb for each percussion sound.

Yamaha XG

Yamaha expanded on the GM specification by offering four main advantages with their XG system: more sounds, editing capability, effects processing and external inputs.

Sounds: XG increases the instrument and percussion sections to a minimum of 480 sounds. It implements a bank selection system to house the increased number of voices. To select a particular sound, a bank is first selected then followed by the standard program change message. The sound selection process is delayed until both a bank select and program change message are received. Sending only a bank select message won't work.

The bank selection is divided into two: MSB and LSB. MSB specifies sound type: instrument (melody), sound effect, or rhythm voice. This means percussion isn't limited to MIDI channel 10, as in GM. The LSB selects instrument variations.

Editing: In addition to the control options of GM, XG provides additional parameters allowing sound waveforms to be changed. This includes brightness control (filter cut-off frequency), harmonic content (resonance), attack rate, release time and others. These enhancements can be applied to any sounds in the XG sound sets.

Effects Processing: XG provides effects processing which can be applied to individual MIDI channels or to all channels simultaneously. There are three effect groups: reverb (8 types, ex: hall, room), chorus (8 types, ex: chorus, flanger) and variation (35 types, ex: reverb, chorus, tremolo, rotary speaker, auto-wah, amp simulator, distortion). Each effect can be modified with real-time parameters such as: time and frequency. Some devices may also include a graphic equaliser.

External Inputs: XG lets sound sources such as microphones, synthesizers or tape recorders be mixed with MIDI playback. Also this audio signal can be controlled through MIDI or processed with the effects.

XG is upward compatible with GM, so GM data will playback and can be created on any XG tone generator. However, XG enhanced files will not playback on GM devices.

GM Concerns

GM and its many offshoots don't guarantee 100% accuracy between systems. Although GM gave guidelines to manufacturers, it didn't give specific details on implementing all features. Each manufacturer interpreted things differently, so every device has its own quirks.

Of particular concern is the allocation of voices. Though GM guidelines need a device to have 24 voices, it doesn't specify how they are used. So an instrument, like Drawbar Organ (#17), may need one voice on one device but four or more on another. To be sure, don't use the maximum voices, where possible. Similarly, if a sound has a longer release, it will still use at least one voice as it continues to fade, even if you can't hear it. So it's important to be careful holding notes longer than necessary. Don't assume that because you can't hear a voice that it's not playing. If in doubt, try turning the volume up and listen closely.



▲ The manual is full of technical information.

Another concern is that GM does not specify what VCA envelope (volume shape) each sound should have. This means the release (time for volume fading) may vary between devices. Some sounds may cut-off or overlap on one GM device but not another.

General MIDI provides a great way for composers to share their MIDI creations with others, making it more likely that the listener will hear a song the way it was intended to be heard. GM isn't appropriate for all applications, but has been well designed overall, and with the future in mind. Enhancements, like those provided in XG and GS do improve alot on the original specification. ■

Dhomas Trenn

More MIDI info

MIDI Manufacturers Assoc.
web:www.midi.org

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Desktop Publishing

Professional Page 4.1

PART 5

In this month's DTP workshop I'm going to show you one of Professional Page's most powerful features – Tags.

Once you see how versatile tags are, you'll probably wonder why many other Amiga programs haven't been able to match Professional Page in this area.

Tag is the name given to a function which is used for formatting text and when used properly, will help you to not only keep a consistent look to the text in your document but also give you a helping hand when you need to alter the attributes of a piece of text which occurs many times in a document.

There are two types of tags in Professional Page, Style and Paragraph. In most circumstances, the Style tag would be the one that is used most often but I would also urge you to look carefully at Paragraph tags.

Why you need tags

Let's assume you are creating a magazine spread like our sample used last month or the article you are reading now. In a normal spread you will probably find four or five different types of text blocks which require different attributes. A main block of text would have different attributes to those used for captions, subheads, straps and so on.

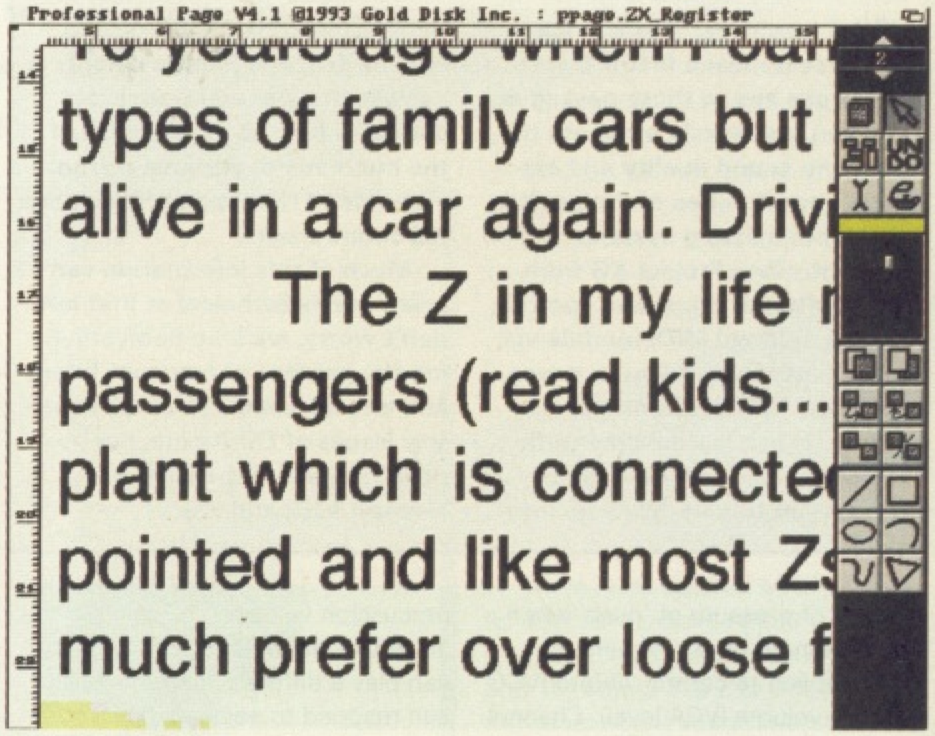
As an exercise, look at the spread in this issue of CU Amiga. Count how many different types of text blocks you can see on the page. Then count how many of one type there is. You will find for example, quite a few occurrences of captions and subheads.

Formatting these different text blocks is easiest when using tags. This is because a block of text such as a caption, will contain quite a few different attributes such as font, size, colour, justification, kerning, tracking and so on. Applying these one by one is time consuming and could lead to mistakes where the font for example, used in one caption is different to the font used in another.

Paragraph Tags

When creating tags, the first rule is to make sure that any paragraph tags required are created first. This is because the Paragraph tag is a sub-set of the Style tag and if you create the Style tag first, you're not able to choose the Paragraph tag until you've created those needed.

Paragraph tags may not be essential but if you want to set attributes for indenting text or altering the space between paragraphs and associate these attributes with a Style tag, then you'll need to create a paragraph tag for it. One of the most common uses I have for a paragraph tag is to indent whole blocks of text like those used for lists or bulleted items.



▲ **The first line indent seen here is controlled by the Paragraph Indent attribute in the Paragraph tag requester.**

When creating a Paragraph tag, the first job is to give the tag a name. After that you can set margin indents which allow a whole block of text to sit indented from the text above and/or below it.

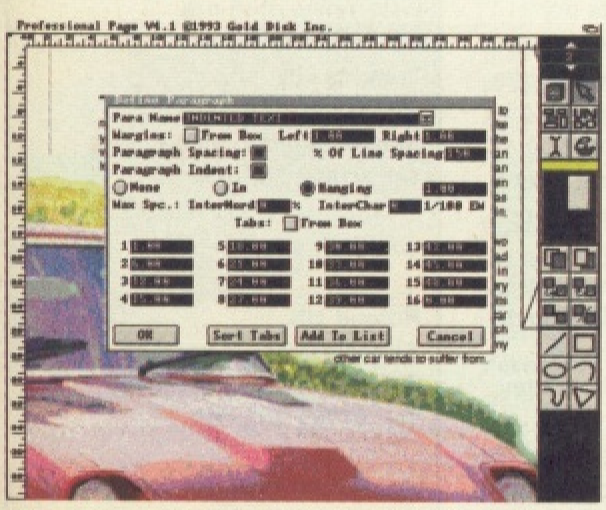
Adding 'Paragraph Spacing' is useful because you can have Professional Page automatically add extra space between paragraphs instead of using the return key to add a line of white space between paragraphs, the method most people use. By using a paragraph spacing of 150%, Professional Page can add half a line of white space between paragraphs which can often look more professional. Our next attribute is the Paragraph Indent. This lets you tell Professional Page how you want the first line of text to look in relation to the lines of text above and below it. This can be indented, hanging or have no indent at all. The most common usage is a small indent which is about one third of an inch.

The last attribute I want to look at is Tabs. These are normally applied to text from the attributes that are set in the tabs for each text box. You can however overrule these by having the tabs from the Paragraph tag applied to selected text. This is most useful when you have many columns of text which require multiple text boxes.

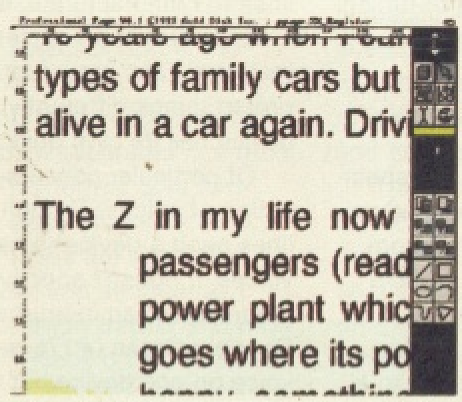
When you've finished setting the attributes for your Paragraph tag, click on OK or 'Add to List' if you intend creating more than one Paragraph tag.

Style Tags

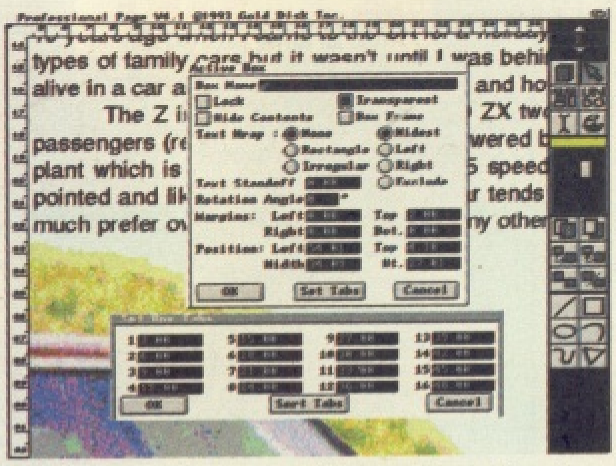
Our next type of tag is called Style, which is for applying the required font, size, colour, Paragraph tag and other attributes to selected text. The Style tag is the one you'll use most, so let's go through some of the attributes you'll have at your disposal. A tag name is the first thing you



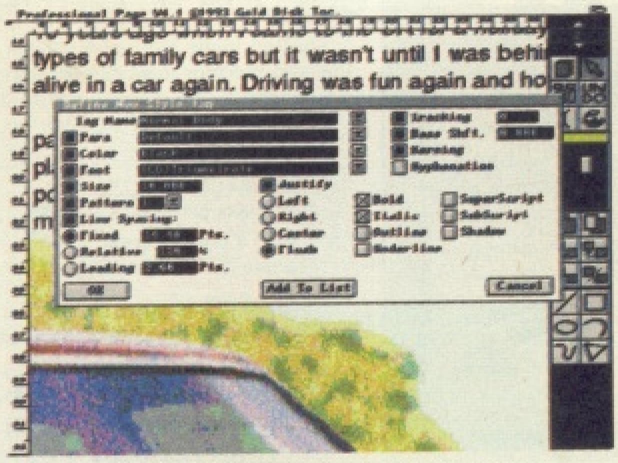
▲ **The Paragraph tag is used for applying attributes like paragraph spacing, indents, first line indents and tabs. It can be used in conjunction with a Style tag or on its own.**



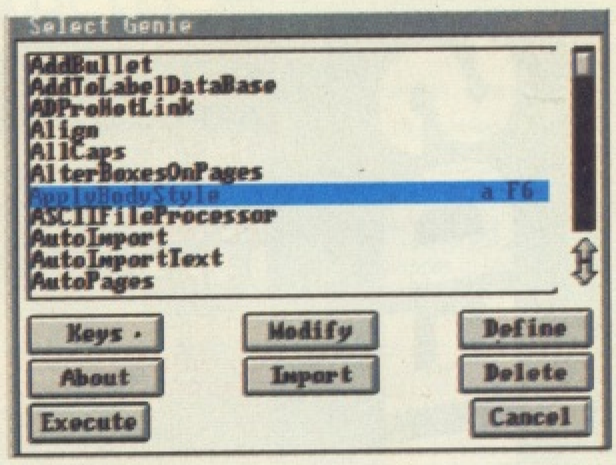
▲ **The first paragraph seen here is the 'normal' way of presenting text while the second one uses a more unusual Hanging indent.**



▲ The tabs used by your text within a text box are taken from the tab attributes created for that text box. These can be overridden by using the tabs set in a Paragraph tag.



▲ Style tags are essential for creating documents with consistent text attributes as well as speeding up the formatting process.



▲ In next months tutorial, I'll show you how you can make use of ARexx Genies – including a custom one which lets you apply a Style tag to selected text using a keyboard short-cut.

need to create. I normally have a tag called Body for formatting the body text within a document and then create other style tags based on the Body tag. These other Styles are called BodyBold, BodyItalic and BodyBoldItalic. That way, I can make some text bold within a block of body text using a style tag. I do this because I can apply tags using keyboard short-cuts which we'll cover next month.

The next attribute is Para. If you click on the down arrowhead at the end of the Para text gadget, you'll see a list of Paragraph tags available which you can apply to the text formatted using this Style tag.

There are also arrowheads at the end of the Font and Colour text gadgets enabling you to choose the font from those currently installed and the colours in your colour palette. I should also point out that the square button at the start of each attribute can be turned off so that attribute is not applied to selected text.

The size of your text for a specific Style tag is entered by typing the number of points you want your text to be. Most body text would be 10 points, although it can vary between 7 and 14 points.

Line Spacing

One of the most interesting attributes is Line Spacing. This can be turned On or Off. When turned on, you can choose between three ways the line spacing is applied. The Fixed gadget lets you tell Professional Page the total height of both the text and the white space. If you had 10 point text and entered 14 into the Fixed Line Spacing gadget, then the line spacing would be 4 points.

If however you entered 4 into the Leading gadget, then 4 points of white spacing would be added to the text no matter what the size of the text. The third option for line spacing is a percentage of the text, normally set to 120. This adds leading which is 120% of the point size of the text. This means that the larger the point size of the text, the more line spacing there is.

Text Justification

To the right of the Line Spacing text gadgets is a column under the heading Justify. When Justify is turned on, you have four choices. Left means text will be lined up down the left of a column but ragged (uneven) down the right side. If you choose Right, the text is lined up down the right side of the column and ragged down the left. This can be used when you have a picture placed on the right of a block of text such as a caption.

Click on Centre and then each sentence will be centred within a column which will result in the left and right edges being ragged. The final choice is Flush which tells Professional Page that you want the text to be lined up in a straight line down both the left and right edges.

Text Styles

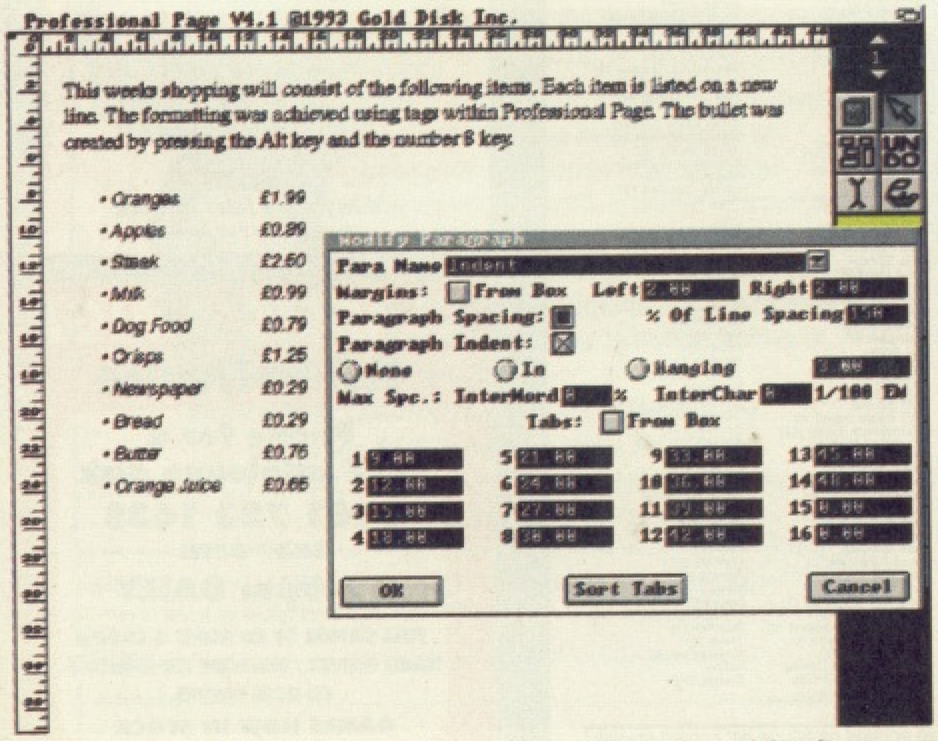
On the far right of the Style tag requester are your Style options. Not all these styles can be used because most fonts – other than some original Professional Page ones, cannot be made bold, italic etc. However some of the other styles can be applied such as underline, shadow and so on.

The buttons to the left of the styles can be set to one of three modes. When the button is white, that style is turned off. When the button is black, that means the style will be applied to all selected text. When the button is crossed, it means the style is neither on or off. This means some text could be given a shadow later on (from the Type/Style menu items) and the tag will allow you to do that.

Of the attributes that are left, I would leave Tracking and Base Shift just as they are for most documents. But make sure Kerning is set to On and if you want Hyphenation off, be sure the button is white (Off).

Well that's enough about tags for this month. In next month's issue I'm going to show you how these tags can be applied with keyboard short-cuts using ARexx. This requires the use of custom genies, and if you haven't got your free genie disk available when you buy a Professional Page manual, then try contacting LH Publishing on the following telephone number: 01908 370 230. ■

Larry Hickmott



▲ Here is a shopping list and the paragraph tag used to create the indent and the tabs.

Readers Questions

I have been asked a few questions over the last month and here are two of the most popular starting with the 'Crash on Quitting' bug. This is a known bug and is caused by a few things, but I found that when CGFonts are turned off by changing the Fonts Tool Type in Professional Page's icon, the program doesn't crash. ProPage without CGFonts though is next to useless, so my advice is make sure you save your document as well as a backup and then reset your Amiga without quitting.

The second question is about importing graphics. A number of people tell me that their ProPage won't import pictures which is surprising because when I tested the coverdisk, this function worked fine. However, if yours is giving you trouble, try holding down the Shift key when choosing Import/Graphic. This action brings up a requester listing available graphics filters. Choose the appropriate filter and the image should be imported fine.

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Lulu Divine AGA
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Tina Small
Big Boobs #1
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Tetris Sex Special
Global Overdose
Purity Test
Wheel of Fortune
Adult Jigsaws
Pam Anderson #1 WB2+
Pam Anderson #2 WB2+
Mega Maid
Hustler Girls #1 (2)
Showering Girls
Sexy Druids (3)
Sex Puzzle
Escort & Fiesta
Manga-X #1 WB2+
Manga-X #2 WB2+

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Wibbly World Giddy
Holy Grail (txt adv)
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Donkey Kong AGA
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Raise the Titanic
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Nanofly
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Amos Loadsamoney
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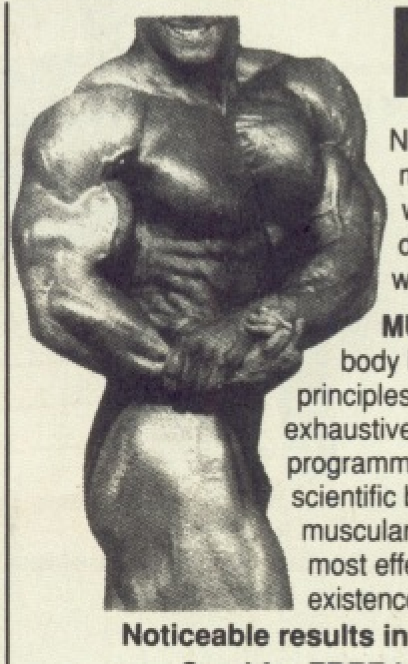
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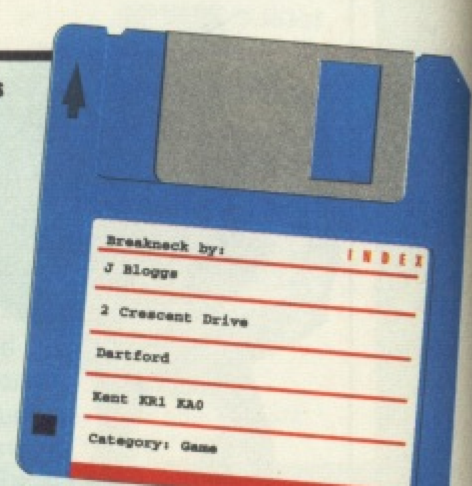
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Next Month

In CU Amiga Magazine...

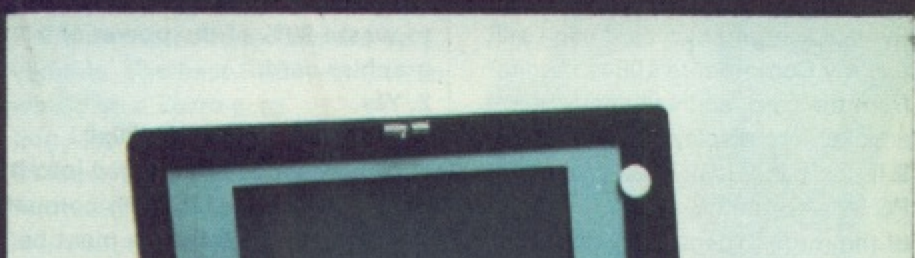








TFX: Supersonic thrills, only from CU Amiga Magazine!



PLUS: Meet Suzanne, the portable Amiga. Find out how this once-humble A600 has been transformed into a mobile multi-media machine, complete with CD-ROM drive, flip-up LCD screen, mouse tablet and stereo speakers...

Following up this month's look at the ICS and Micronik tower Amigas, we'll be turning our attention to another 'off the peg' tower solution, this time from Eyetech. Other September issue highlights include a review of HiSoft's promising new CD writer solution and lots, lots more. Don't miss it!

October issue on sale 18th September

Q&A

Whatever the level of your technical problems, you can put them to our experts who will do their best to sort you out. Please remember to supply us with as much information about your systems and problems as possible, in order to help us help you.

Logos

Mysteries and meanings ...

Workbench: Solutions to those everyday troubles with your Workbench.

Expansion: If you need help getting more from your Amiga, just ask!

Comms: All your Internet and general comms problems swiftly solved.

Sound: Trouble making your Amiga sing? We've got the answers here.

Hardware: Technical matters beyond the scope of plug-ins and plug-ons.

Software: Answers to queries on particular pieces of software.

Help: General queries which just don't seem to fit in anywhere else.

CD-ROM: Specific help with CD-ROM solutions and driver problems.

Graphics: Problems with art and design? Help and advice is at hand.

Peripherals: Printers, monitors, we'll solve your peripheral blues for you.

AGA upgrade

I am having an upgrade dilemma. I own an Amiga 1500 with 1Mb chip RAM, two floppy drives, and a clock with a battery backup. The operating system is upgraded to Workbench 2.05.

As I cannot run programs that utilise the AGA chipset I am limited, to a degree, in the amount of software which will run on my computer – not to mention the graphical capabilities I'm missing. Upgrading my A1500 to work with AGA is an appealing option, but I'm not sure how to go about this. I can get hold of a Super Denise chip and a video DAC chip for an A1200 for around £20 each, but I am not sure that these will work inside my Amiga or even if they are sufficient for the intended upgrade.

Please advise me if these are the correct chips to buy, or am I barking up the wrong tree? If so, please can you help me?

James Fairless, Norfolk.

Sorry, but it just isn't that simple. The AGA chipset simply will not work with an A1500 motherboard, which works in a substantially different way to that of AGA machines. There is absolutely no way of retrofitting an AGA chipset.

There are however certain alternatives. There is a software AGA emulator available from the public domain, which of course doesn't give you any extra graphics modes but makes a stab at re-targetting some of the AGA graphics modes on to the older chip sets. This is a long way from being a satisfactory solution, however.

A much better alternative would be to get yourself a graphics card. These will only help with software which opens up a screen that can be promoted to your graphics card display. However this covers any Workbench application for a start. It will also relieve the pressure on your Chip RAM, which is rather small by the standards of AGA machines.

Tower help

I have found the series on the DIY Amiga tower very interesting, and will be upgrading my system in the very near future, but firstly I would like your advice on a few small points.

1.If I upgrade to a full tower with a busboard and add a Picasso IV or Cybervision graphics card can I still use my Commodore 1084s monitor from the card, and will this give me a flicker free display?

2.If not, can I use cheaper PC SVGA monitors instead of the more expensive multisync monitors?

3. I was thinking of upgrading my 25Mhz 68030 to a more powerful 68040, but I noticed Blittersoft advertising the Blizzard PPC 603e card. Is this faster for rendering 3D graphics etc. than a 68040, and how compatibile is it with already existing software?

4. I have heard that the infinity tower allows a Pentium processor to be connected to the Amiga via the PCI and ISA busboard. How does this interface to the Amiga, and will I need the Siamese System?

5. Does the Cybervision 3D card support a flicker free display, or are they upgradeable to flicker free?

6. Is it possible to use the Catweasel and the Eyetech buffered IDE splitter along with the Dataflyer SCSI 2 interface?

7. Will I be better off getting one of the SCSI interfaces that can be purchased with an accelerator card?

8. If I added the PortPlus from Eyetech will this improve the output speed of my printer?

9. Will the PortPlus help the throughput of my modem to my Amiga and what are the actual speed gains compared to the normal serial ports?

Christopher Clarke, Hull.



Phew! OK, here goes...

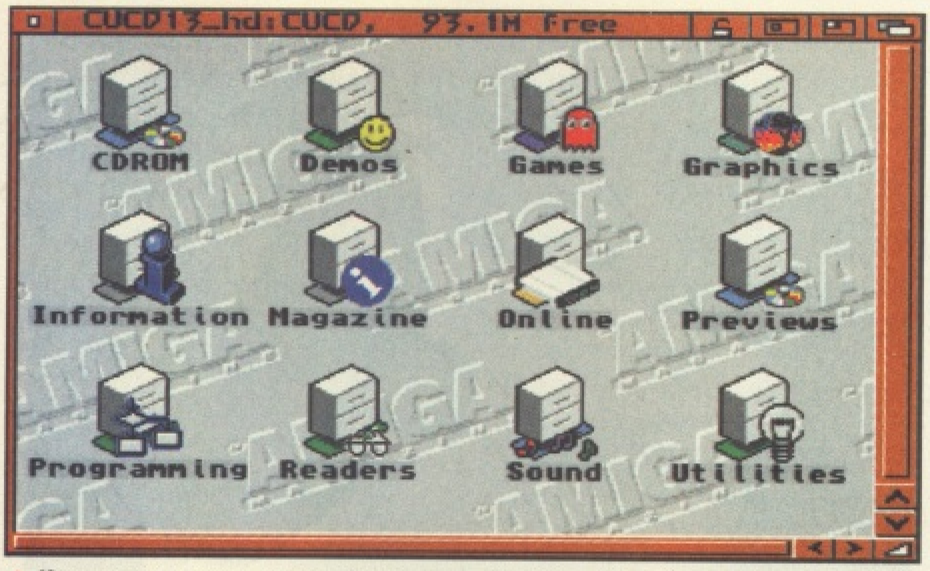
1. Yes, but you won't want to. The 1084 displays only 15khz modes and PAL resolutions. You'll need a high res. monitor if you don't want to waste 90% of the power of a graphics card.

2. Yes.

3. The card requires a 680x0 processor to be plugged into it. This makes it 100% compatible. Software must be specially written to take account of the PowerPC processor. Programs such as Imagine, Aladdin 4D, PPaint and ImageFX are being converted, expect any more to follow. There seems to be a general misunderstanding about these cards, so let us make it clear now.

For packages such as these which require heavy processing power, the PowerPC versions are a lot faster than conventional accelerators. This is not the kind of performance difference between an '030 and a '040. PowerPC chips are a whole order faster. See CU Amiga August 97 for more.

4. The PCI slots on the busboard are unconnected. The Pentium cards allow two computers in one case. They don't integrate the two platforms. The Siamese System solves this problem for brilliantly.



▲ If you want to spruce up your Workbench, an injection of fancy icons can work wonders (see New look Workbench).

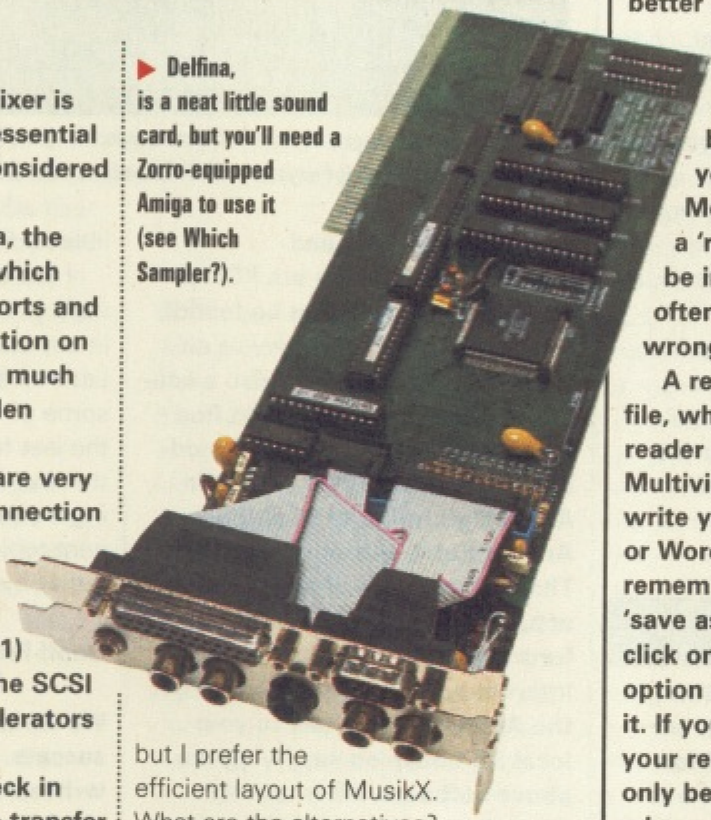
See last month's review.
5. The Cybervision flicker fixer is sold separately, but is an essential purchase and should be considered part of the package.
6. With a Zorro'd up Amiga, the Buddha and Catweasel – which gives you 3 buffered IDE ports and full Catweasel implementation on a single board, would be a much safer solution. Talk to Golden Image on; 0181 900 9291.
7. These SCSI connectors are very variable. The best SCSI connection would be a Zorro solution – surprise surprise. Oktagon 2008 at £89 from White Knight (01920 822321) is probably the best bet. The SCSI connector on Blizzard accelerators is a good one though.
8. Not hugely. The bottleneck in printing is not so much the transfer rate from computer to printer as the translation of computer data to printer data. Accelerators are the best way to speed up printing.
9. The Amiga serial port can cope with 33k modems, but a Port Plus will allow you to happily use 56k modems and faster. The speed increase is fourfold, from 115200 maximum baud rate to 460800.

Which sampler?

SOUND

I use an Amiga 1200 (6Mb), running Music X, to sequence a MIDI set-up. Whilst looking to add a sampler I'm also considering putting my Amiga to good use by equipping it with a 16-bit sound card and a 16-bit sampler cartridge. Before I take this step, I need to know what Amiga sequencers are available that will support 16-bit samples and MIDI.

I've looked at OctaMED SoundStudio, which is great if you are composing 'Concrete Jungle' as a friend of mine does quite happily, but I prefer the efficient layout of MusikX. What are the alternatives? Can you recommend a good sound-card for the job?



▶ Delfina, is a neat little sound card, but you'll need a Zorro-equipped Amiga to use it (see Which Sampler?).

MJR, Portsmouth

We have to break this bad news to A1200 owners all the time. There is no A1200 compatible 16-bit sampler that we recommend for general music use. All the best ones are Zorro cards. The closest you can get to those is HiSoft's Aura, which is very limited in its practical uses (it won't simply upgrade your 8-bit audio to 12-bit). If you want to continue using Music X, your best bet is to get an outboard MIDI sampler. Akai models are accepted as the 'industry standard' but don't let that put you off investigating superior models from Roland, Emu and Yamaha. Second hand MIDI samplers generally aren't much of a bargain though. New models are better value. Also you must check out our 'Project XG' sound card, which will work very well with your existing Music X set-up.

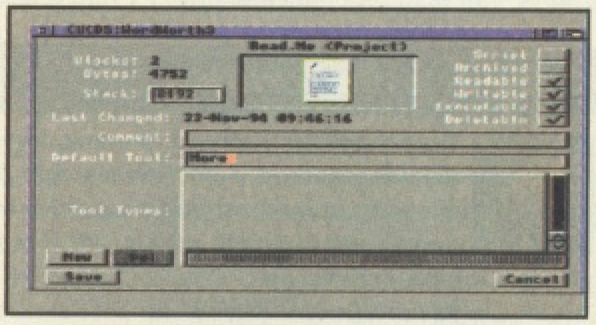
Spreading your wares

TECH TIPS

Everyone does something creative with their Amiga at some time. You might write a program, draw a picture, make a mod collection, render a 3D animation or any number of other things. You'll quite likely decide that you want other people to see it. There are plenty of ways of distributing the product of your creative outpourings. You can upload your offering to the Aminet, you can post it off to your favourite PD library, or even better you can send it in to us as a contribution for the CD.

Whichever of these you do, you should put a little bit of effort into the way you present your work. Most important of all is that a 'readme' file should always be included. It is amazing how often people get this bit wrong.

A readme should be an ASCII file, which means that any text reader (such as PPmore or Multiview) can read it. If you write your readme in Finalwriter or Wordworth then remember to select 'save as' and then click on the ASCII option when you save it. If you don't do this your readme file can only be read by those who own the same word-processor as you – and can be bothered to load that up first. Make the readme file a click-to-read icon. This is actually quite simple. The icon will have a default tool. This is the program that the Amiga loads up for the file when you click on the file's icon. If you wrote your file in Final Writer, the default tool will be set as Final Writer. If you save this on a disk and send it to someone, they'll find that when they click on the icon their Amiga will start to look for Final Writer – in the place it is found on your hard drive. This is not good. Instead, change the tooltype to 'More' and copy the 'More' text reader from your Workbench utilities directory to the root of the floppy. You can change tooltypes by single clicking on an icon, then selecting 'information' from the icon menu. Select the default tool name, delete what is currently there and type in the new entry. Then when someone clicks on the icon, their computer will load More from the disk you have provided and use it to display the text you have written. It's simple really.



▲ Here we are editing the default tool for this project. 'Absolute' paths should not be used in this case.

New look Workbench

WORKBENCH

I have spent a lot of time and hard work in upgrading my Amiga, but I've become a bit lost as to how to configure it to get the best out of it.

For instance, I would like to clear my hard drive and start again from new. I would like to upgrade the look of Workbench by using Magic Icons or maybe NewIcons. What would be the best order to install the software? Is Workbench 3.1 a worthwhile upgrade, and is it going to provide me with all the libs that I find programs wanting?

To sum it all up, if you were to start from the beginning, where would you start, with what, and how would you do it? I have an A1200 with an Apollo 40 Mhz '040 and 16Mb of Fast RAM, plus a CD mini-tower with 8 speed CD-ROM and a 1.6Gb hard drive.

PJ Starck, Dorset

We could fill a few pages with this one... and in fact almost certainly will very soon. Workbench is a great system but one which is showing its age. Fortunately many pieces of shareware or freeware are available to give Workbench a boost. We don't have the space here to tell you about every little patch we have come across, but here is a quick and dirty guide.

Install Workbench as normal. There is no huge reason for upgrading to 3.1 as most of the libraries you are missing are actually likely to be third party libraries. Most PD companies will sell you a disk full of libraries, if

everything you want can't be found on a CUCD.

After that comes the customisation. First off, go through one of our recent cover CDs and make sure you have a good range of C: commands, especially things like PPMore which are often assumed to be in your path by programmers who use them as default tooltypes on their text file icons. If you don't mind going a bit over the top, there is no reason why you shouldn't just copy the entire contents of the CUCD c, l, devs and libs directories onto your hard drive, but for space and efficiency it's a good idea to prune, especially if you have a small sys: drive.

Next come the specials. Customisation is very much a matter of taste, but we would recommend MUI, KingCON, and MCP. MUI, despite the opinions of some, is a must-have. It is a quite brilliant GUI system and is required by a lot of software these days. KingCON is a Shell replacement which makes CLI usage a whole lot nicer, and MCP is a commodities suite which does – well, just about everything else. If you find yourself going berserk with multitasking, you may find Executive to be a useful addition. Now you can go for the cosmetics – we'd advise NewIcons, which look very nice indeed and almost never suffer dodgy palettes. There is no reason, however, not to run both Magic Workbench and NewIcons.

PhotoCD

I have put my first photos onto CD (Kodak PhotoCD) but as yet I've been unable to load them into my A1200.
I wish to load them into ImageFX for a bit of touching up before using them in Imagine 4. Do you know where I can acquire some Datatypes for the .PCD format, or is there a program I can use? I am not on the Net.
If such a program exists, maybe you could put it on your cover CD, and even better, if it is PD, maybe you could get permission from the author to send to Kodak for them to put on their CDs?
They have viewers for PC and Mac, so why not for the best graphics computer ever made? This would not only be a great advert for the author but for the Amiga itself.

Colin Baker, Kent

Graphics file formats

Graphics data is stored in many different forms. The Amiga default standard is IFF. Increasingly JPG, GIF, PNG etc. are showing up and varying properties mean one is good for certain uses but not others. JPEG is the more popular but wrong usage is dangerous.

JPEG's advantage is that you can produce very small byte sizes – the trade off being quality. Ask yourself if you need to compress the image so much, and is it worth losing quality over? JPEG is a 24 bit format which stores colour information for a 16.7 million colour palette. If your image is only 256 colours, you're likely to find GIF or even IFF to give you a smaller file size. Here are some comparisons for two files. File 1 is 256 colour, file 2 is full 24 bit.

IFF:
1. No loss of image quality. Very fast to read and write. 63.9k
2. No loss of image quality. Very fast to read and write. 520.2k

Jpeg 100% quality:
1. Some loss in image quality. Slow to read and write. 85.9k
2. Some loss in image quality. Slow to read and write. 536k

Jpeg 75% quality:
1. Obvious loss in image quality. Slow to read and write. 20.1k
2. Obvious loss in image quality. Slow to read and write. 90k

GIF:1. No loss in image quality. Fast to read and write. 49.6k
2. Can only handle 256 colours – real loss in quality even dithered. Slow to write, fast to read. 327.4k

PNG:
1. No loss in quality. Slow to write, fast to read. 44k
2. No loss in quality. Slow to write, fast to read. 382k



▲ A typical hand scanner. Without software support for parallel connection flatbed scanners, Amiga users have to go for expensive SCSI flatbeds or one of these.

Both PCD_2_2a.lha and PCD_Manager_3d.lha are PCD to IFF converters, and can be found on the Aminet in gfx/conv or on Aminet Set 4. There are also a couple of things that you might find more directly useful – fastifxmodul66.lha and pcd100.lha, both in Aminet/gfx/misc, the first of Aminet Set 4, the second on set 1. These two pieces of software are actually ImageFX loaders for PCD format images. As you don't have internet access, you can either get the Aminet CDs or talk to your local PD house on supplying the above software. Alternatively check in this issue's CUCD, where, barring flood, earthquake and forgetfulness, you should find some of this software.

Parallel scanning?

Since buying my A1200 nearly 3 years ago, I have become a complete devotee. My set up is quite extensive, and I use it mainly for video and graphics.

I have been a keen photographer for many years and my job has always been connected with graphic reproduction so you can see the reason for my enthusiasm for the user friendly Amiga. I have recently been using a friend's PC with a Scantek scanner, saving Images to floppy as JPEGs and printing out on the Amiga system. The results have impressed us both, certainly as good as those I get from PhotoCD. So, is there any way I can connect the Scantek to the A1200? There does appear to be a considerable difference in the price compared to SCSI scanners, with parallel port models available for as little as £120.

I enclose a couple of results from my printing and would be interested in any comments you have to make. Let's all hope the Amiga can recover some of the position it has lost in the last few years. It seems to me that but for a lack of proper marketing it should have been the pre-eminent tool for the graphics industry rather than the Mac.

Geoff Freemantle, Hants.

We've hunted around but without success. No-one seems to have written driver software for parallel machines. Programmers may well have discovered that the parallel port on the Amiga is too slow for such devices to be practical. However there is a good range of scanner drivers for SCSI scanners. You can go for a good SCSI model at reasonable cost, something like the Artec Scanner available from Gasteiner (0181 3456000) or the Epson models from First Computer Centre (0113 2319444).

Alternatively you could get a SCSI scanner pretty cheaply second hand. If you want to go down this path, look for something which is fully compatible with Hewlett Packard, Microtek, Mustek and Highscreen scanners – there is driver software available for these from most PD libraries.
We liked the images you sent in but have a couple of suggestions for you. Firstly, try some of the photo quality papers on the market. They may look like an expensive gimmick, but they really do work. Secondly watch for Floyd Steinberg dithering. Although it

produces very natural dither patterns, it also softens edges. Experiment with sharpening and contour enhancing filters in something like Image Studio or ImageFX before dithering.

No DOS

I should be able to access my CUCDs using other computer systems. This hasn't been the case since CD4. I'm trying to use a PC 486 with both windows 3.1 and DOS6, but to no avail. Please help as my wife complains about the number of unused CDs building up.

Stephen Cooke,

You can use our CDs on any modern operating system. The Macintosh, OS/2, Windows 95 and Windows NT all read CUCDs fine. It's not possible for us to support MS-DOS or Windows 3.1 since it doesn't have support for long filenames. So you can use them on other platforms but not all.

Web sound

How can I configure IBrowse to be able to hear sound files from Web sites (i.e.wav files)?

Francis Laus, Malta

Playing background sounds or MIDI files is fairly complex. See next month's Wired World for details. Check us out online at http://www.cu-amiga.co.uk

Write to Q&A ...

You can send us any of your technical problems [or answers – Ed] to CU Amiga by the following means:

By letter to Q&A, CU Amiga Magazine, 37–39 Millharbour, Isle of Dogs, London E14 9TZ or Tech Tips at the same address. E-mail: q+a@cu-amiga.co.uk or techtips@@cu-amiga.co.uk We can accept letters or text files on floppy disk.

PLEASE DO NOT SEND SAEs. We regret that we cannot respond to queries directly, by post or over the phone, only through the pages of the magazine. We appreciate that some queries need quick answers, but we simply do not have the time to answer every query we get. SAEs go straight in the bin, so please save your stamps!

Frequently Asked Questions

The most Frequently asked of Frequently Asked Questions. John Kennedy looks at the questions which crop up time after time.

Q Can I link two Amiga computers together?

A Yes. It's possible to link two Amiga computers together, using either their serial ports or parallel ports. Using parallel ports is faster, but requires a special lead to be made up. Using the serial ports instead means that a standard null modem cable can be used. The clever part is the software: ParNet for the parallel port, SerNet for the serial port. Many versions of these programs are freely distributable – and easily available, from magazine coverdisks, PD CD-ROMs and Internet or Bulletin Board Systems.

Q Can I link a CD32 to an Amiga to use its CD-ROM drive?

A Yes. The CD32 is an Amiga first and foremost: it just happens to have that CD-ROM drive built into it. Unfortunately, the CD32 doesn't have a parallel port as standard, so it's necessary to use SerNet rather than ParNet. The CD32 doesn't have a standard serial port either so a special version – using the available ports must be used. For more info on this, plus the leads and software needed, contact one of the regular hardware suppliers advertised in CU Amiga.

Q What happens when they are linked?

A When you link an Amiga to another Amiga, you can specify the devices to be shared. This means that Amiga 1 can access the hard drive and floppy drive of Amiga 2. Likewise, Amiga 2 can access the CD-ROM drive fitted to Amiga 1. This sharing of devices extends to virtual devices such as the RAM Disk. This doesn't mean the Amiga's can pool their available memory for running applications.

Q Is it the same as a network?

A Not really. A proper computer network is more concerned with sharing files and printers than allowing machines to fiddle with each other's floppy ports. By default the Amiga's file handing system isn't up to multi-user access, though products like Envoy provide the necessary facilities.

Computer networks tend to be a lot quicker too, and rely on a standard such as 'Ethernet' rather than parallel or serial ports. An Ethernet connection is very fast, but requires extra hardware. Ethernet cards are available for Amiga's fitted with Zorro slots, and there are reported sightings of PCMCIA cards for A1200 users.

Q Could I link a PC up with an Amiga?

A Yes. If your Amiga has an Ethernet card, you can connect them in this way and run a common protocol such as TCP/IP, and Samba for networking file handing. Sounds complicated? Good! It is. It's a lot simpler to connect the machines via their serial ports using a null modem cable and run a terminal emulation program on each, or else you can run a program such as Twin Express. Alternatively, Weird Science are selling 'PC Network' which does the same kind of thing via the parallel port. These solutions are ideal for situations where you want to swap data between the PC and Amiga, but couldn't be bothered using a PC format floppy disk and CrossDOS.

Q Can I run PC programs on an Amiga?

A Yes, because it's possible to buy software-based (that is, no extra hardware required) emulators. However, they run extra slowly by their very nature, so you won't be able to run state-of-the-art games or big applications under Windows95. They can run older DOS applications though, and some very old games. Don't assume that as your Amiga has a CD-ROM drive, it can run all PC CD-ROM software. CD-ROM is only a form of media, like a floppy disk.

Q Can I run Amiga programs on a PC?

A Yes, there is an Amiga emulator for the PC called 'UAE'. It's freely available, but again don't expect miracles. On a fast, Pentium based PC expect performance close to that of an unexpanded A1200. Emulating faster Amiga's does require faster Pentiums', such as P166 models and upwards.

Q I have an accelerator card and a hard drive, but do I need a new PSU?

A It depends as power consumption does vary. If your Amiga works o.k., and your PSU isn't making funny noises or smells then it's probably fine. If there's unexplained crashes, or your Amiga only runs reliably with either the accelerator or hard drive, it's likely the PSU is being asked for too much power.

Q My computer crashes.Why?

A If it always crashes when you do the same thing from within an application, it could be a bug in the software. If it crashes randomly, even when you aren't touching it, maybe it's a hardware problem. Try checking all plugs and sockets are fitted properly (especially the power supply plug into the back of the Amiga), and that all expansion cards are slotted in as far as they will go. If necessary, remove expansion cards, clean the contacts in the trapdoor and re-install them. If you have a heavily expanded system, it could be a lack of power.

Q When I switch my Amiga on, the hard drive is so busy I can't write to the disk or delete anything from it.

A The hard drive isn't valid. For some reason, the data stored on it is corrupted. The Amiga sees this, and tries to fix the damage. Whilst it's doing this it marks the drive specially – so you can write to it, delete files or attempt anything else which would make matters worse. Leave it alone, and it should fix itself after ten to twenty minutes. If the problem continues and you aren't doing anything daft like switching it off while it's writing to disk, there could be a hardware problem. The disk could be failing (try re-formatting), or it may be the power supply... Or even a virus!

Q My Amiga is hooked up to the Net. Some E-mail messages warn me about the Good Times virus, or Penpals virus. Will these effect me as I am not using a PC?

A Most (all?) of these messages are hoaxes. Simply ignore any kind of chain message.

Backchat

Make yourself heard. Send your views and opinions to Backchat, CU Amiga, 37-39 Millharbour, Isle of Dogs, London E14 9TZ, UK. Or E-mail to backchat@cu-amiga.co.uk

Silver service

This is the first time I've written to a magazine and my reason for putting pen to paper is so I can share my delight with someone.

On the odd occasion I have suffered, as no doubt others have, with the 'could not care' attitude of the retail trade. For example having to wait for six weeks for an item of furniture to be delivered. On the other side of the coin there are those people to whom you have to say thank you for a job that's well done – Eyetech of Stokesly Nr Yorkshire are such people.

On three separate occasions I have telephoned the company for their advice and on each occasion I have received much courteousness and excellent advice. Their service is astounding in that twice I have ordered from them and have both times received the goods the following day. I must congratulate the postal service also for their part in this remarkable service. A big thanks to all of you at CU Amiga. Keep up the good work.

Thomas Hornsby, Cornwall

Well done Eyetech. On other platforms it's not uncommon to be charged for an expensive courier – with no choice, and the goods are dispatched several days later.

Taken for a ride

A word of caution to all Amiga users. Don't be fooled into paying far too much for hardware from Amiga shops. They are taking us all for a ride. Sure, we need them for certain upgrades which are Amiga specific such as accelerators and monitors but what about memory, hard drives, printers, CD-ROMs etc. These are all industry standard and can be bought dirt cheap from PC companies who advertise in places such as Micro Mart. I have recently purchased a 2.5Gb hard drive for £150! That's almost £60 cheaper than you will find in this magazine. Stop paying over the odds when buying your hardware and shop around.

Ian Otter, Grimsby

It's true that many Amiga compatible peripherals are available cheaper from PC retailers. The main reason for this is that the PC companies are selling to a far bigger customer base than Amiga dealers, and so are able to reduce the profit margins on their products. They can do this because they simply sell much more gear. The problem with buying from PC dealers is that you'll get no Amiga-specific support. For example, if you buy a hard drive from an Amiga dealer it will often come pre-installed with Workbench and a selection of useful shareware tools. If you bought the same drive from a PC dealer you wouldn't even get any software to prep the drive. Similar stories could be told of CD drives, printers and so on.

While Amiga dealers may charge more for certain items, this does not amount to a rip off. Take a look at the size of the Amiga scene and compare it to the PC market, or even the Amiga scene in the early 90s. We should support the Amiga dealers that have been prepared to stick around through these hard times.

Top Net tips

Following your July '97 issue I'm now saving madly for a modem etc. and will write in future by E-mail. In the meantime here's a piece of info that might persuade a few others to get connected.

The wonder of cable TV has just arrived in my neck of the woods and most of the channels are sheer dross, but the cable company (Videotron) will also run your telephone line for you. Apart from cheaper line rental and call charges, local calls between Videotron customers are free of charge after 6pm weekdays and all weekend. If your ISP is connected to their telephone network it means you can surf the Net free of charge during these times. The best part is that you don't even need to have cable TV as you can rent the 'phone line only'. Therefore you only have to pay your monthly fee to the ISP.

Currently in Southampton InterAlpha, Cintranet and TCP are registered with Videotron. I've written to Wirenet Amiga Internet asking them to join, pointing out the potential to increase their user base. The more readers who write, the more likely they are to do so... See you on the Net.

If anyone wants details of cable TV write to: Videotron Corporation Ltd, Videotron House, 76 Hammersmith Rd, London W14 8UD or Telephone 0181 244 1111.

Charlie Penny, Hants

Good tip Charlie. The catch you might find is that once the clock ticks past 6pm, everyone with Net access jumps online and the available bandwidth drops substantially as the lines and the ISPs get congested. There's also the possibility of certain ISPs limiting each user to a certain amount of hours online at any one session to avoid this kind

Why don't you...



I have been a regular reader of CU Amiga for four years and on the whole, have found the magazine to be excellent value for money. I was also pleased when you decided to mount CDs on the cover. However I feel that although you have taken some steps to encourage your readers to upgrade to CD that with a little more encouragement more would follow.

You constantly mount commercial programs in order to promote your magazine. Why not negotiate with some shareware programmers and put fully registered versions of the CD-ROM driver software on your disk.

Could you also consider running some DIY articles, or putting some on the CD, as there are loads of projects such as: high density floppy interfaces, using PC sound cards, using PC keyboards etc... In the meantime, keep up the good work. As there is only CU Amiga and Amiga Format available now, the Amiga community needs all the support it can get.

JA Ettles, Lancashire

Funny you should mention the DIY theme. We were thinking exactly the same thing, hence the 18-bit Project XG sound card we've got in this very issue. We'll be developing the DIY series through the following months too, as we know you lot demand more than just recycled features and retrospective fillers. In fact, next issue we'll be taking a look at 'Suzanne', the portable A600-based Amiga that we had on display at the World of Amiga show. We won't let you down!

of snarl up. However, you might find that none of these problems crop up in your area, in which case you've got yourself a great deal!

User friendliness

I have owned an Amiga for about six years, and bought the first one because I wanted to have a computer /games machine that would plug in and just work. The Amiga fitted the bill; no need to study massive tomes on something called DOS, no need to buy a software package to gain the simplicity of the windows environment, and no need to worry about whether the machine would be ready for the museum after a year. I now own an Amiga 1200 and have never yet had to learn any AmigaDOS. The Workbench in my machine must be dying of boredom through lack of use (apart from the minimal format/ copy/ rename functions). The only skill that had to be learnt was how to push buttons on the keyboard, and use the mouse (God, life is hard).

Many users will most likely gasp at my laziness and say that I'm not using the Amiga as it should be. This has been the goal of PC manufacturers (pause to wash out mouth) and surely this has always been the Amiga's strength. It is fine to extol the virtues of AmigaDOS and Workbench, and the wonders that can undoubtedly be performed with their use, but to me the whole strength of the Amiga is the complete lack of knowledge needed to run one. Learning more does increase the pleasure, but it's the friendliness of the Amiga, and the highly efficient use of memory that has finally led to this point.

The Amiga will change in the future because it is changing the future. Gateway has bought it, and from the way they are talking want to use the above mentioned points to design a machine to knock the PC off its self built pedestal. The wait has been long and we have seen many ups and downs, but charge your glasses and join me in a toast. 'Sod the PC... Long live the Amiga'.

David Lanmont, Scotland

Here here! There's still yet to be an operating system that balances user friendliness and multitasking perfomance in the same bundle. Yet there's been no operating system maintenance for a number of years. How long will it be before an updated AmigaOS on an updated Amiga begins to seriously show up the mainstream platforms?

Man oh man

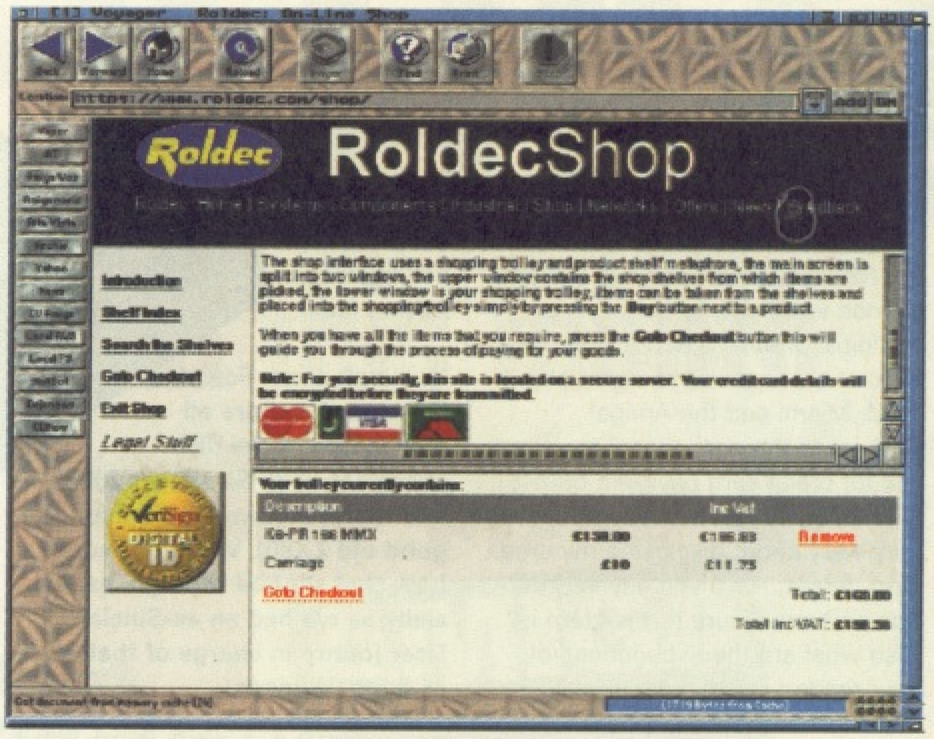
Whilst reading 'The Man' on Channel 4's Teletext, I came across a section called 'Hot Topic' which was discussing a subject on whose machine is better. It started off saying you should 'be happy with the machine you own', and to 'stop slagging off other peoples'. I was extremely happy with the article as I'm fed up with PC owners at school saying I should get a PC and that the Amiga is crap, but I don't see why I should pay an extra grand so I can do all of the things I can do on my Amiga. The last line stated 'Feel free to keep slagging off the Amiga however'.

At this point I immediately felt like getting the t*at that wrote the page and sticking a large [snip! OK, we get the idea – Ed]. I then realised what the same person had said at the beginning of the article - about not slagging off other people's machines. Is that just 100% ironic or what? I don't think this geezer quite knows how many people still use the Amiga, and regard it as their best machine. If he doesn't like the Amiga, he should keep it to himself! I have to use a PC most days at school and I don't complain even when it does keep saying 'Abort, Retry, Fail;'. How about I throw you out the goddam window?

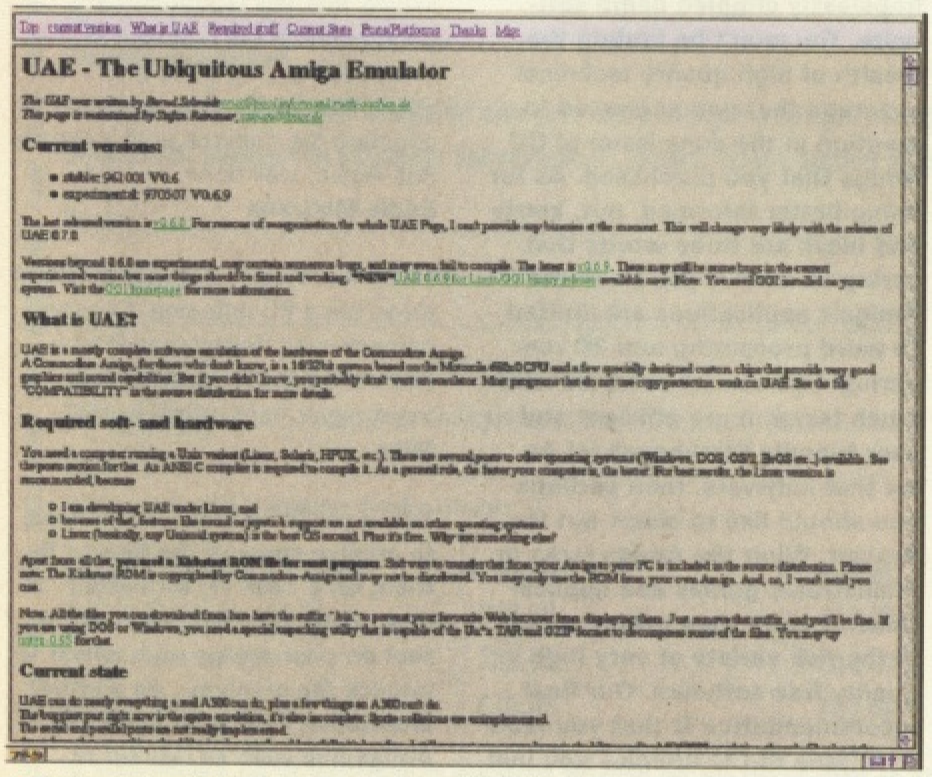
Oh, I almost forgot to mention – your magazine is great, your coverage is excellent, your free disks are really cool, and finally LLAP-Goch rules the earth!!

Dave Preece (Doogle)

Now-now Dave, don't let other people's small mindedness get to you. Anyway, why should we take any notice of someone proclaiming to know about modern computing who still transmits through a sub-ZX Spectrum standard medium?



▲ To buy in confidence off the Web, we need to use a browser which supports SSL.



▲ Nothing to do with the United Arab Emirates, this UAE is an Amiga emulator for the PC.

Millionaire Amiga

I am not aware if you've already looked into and reported this, but one Saturday whilst setting up the National Lottery terminal at the shop where I work, the line broke down and a repair man had to be called in. Whilst looking at the insides o fthe box he informed me that the chips used were in fact those of an Amiga computer. How many, from which model, or even if he was pulling my leg I don't know, but I'm sure you and a few readers would like to know the technology is being used in the safe and secure hands of the Camelot Organisation!

No, we haven't reported on the National Lottery terminals being based on Amigas because we don't know for a fact that they are. However, given Index computer's involvement in creating small 'kiosk' Amiga systems and how suited to quick development the Amiga is, it wouldn't be surprising. If anyone has proof then we'd appreciate if they could drop us a line and we'll pass it on.

Regrets

A friend of mine used to own an A1200 with no extras. He thought it was pretty boring and was lured into buying a PC for £1500. That was one year ago and now he is seriously regretting his actions. He now realises that for £500 he could have bought a CD-ROM, a hard drive, an accelerator and extra RAM. He also sees that much of the good PC software may be converted to the Amiga. Not only that, but new software is being made for the Amiga which rivals current PC software. Games like Forgotten Forever and Foundation make Command and Conquer seem like a child's game.

My friend is now desperately searching the Net in the hope that he might find an Amiga emulator, so that he can play Amiga games on his PC. You wouldn't happen to know where he could get his hands on one would you? It should be great fun watching him trick his PC into thinking it's an Amiga.

I currently spend my spare time gloating around him, with the satisfaction that I have been truly righteous by sticking with my Amiga!

Darren Purdy, Belfast

Continued overleaf ▶▶▶

There's an Amiga emulator for the PC called UAE. Type UAE into a web search engine. It's as simple as that.

Net security

I've just had my first month's trial on the Net and WWW and it is brilliant. Demon were able to help sort out my initial problems and it was great to have a provider who knew about YAM, Miami and the Amiga!

A lot of the web sites I've visited ask for credit card payment before pix etc. can be downloaded but I'm very wary about disclosing my credit card details. Have you any information on how secure this system is? Also what are the experiences of your readers? And does the so-called American Virtual Banking work? Have you any recommendations for me?

gmross@viking-largs.demon.co.uk

We are very glad that more Internet Service Providers are supporting the Amiga. Demon in particular has two newsgroups for Amiga support called demon.ip.support.amiga and demon.tech.amiga, both available to users of other ISPs also.

As for security and transactions on the web, the important factor is to use a web browser that supports SSL. Currently Voyager-NG has the best SSL support although IBrowse supports Miami SSL.

If you are using an https:// site and the browsers inform you that encryption is active, you can be sure that only the company you are purchasing goods from will have your credit card details. Of course you should make sure the company is reputable, as it's all the more easy to get burnt on the Net even though there are plenty of reputable traders.

As for American electronic cash style schemes, First Virtual at http://www.fv.com has increased support in the US. If you've got a credit card it only costs about $5 (your bank does the conversion) to sign up, and it's totally safe since you have to approve all transactions by replying to an E-mail from First Virtual. Miami and Vaporware etc can be purchase via First Virtual for example.

Sir Clive cock-up

Come on CU. Surely some of you are old enough to remember what a Sinclair ZX81 and a Sinclair Spectrum look like? I refer of course to page 28 of the July edition of CU, where you dropped an almighty clanger of referring to a picture of a Sinclair Spectrum and calling it Uncle Clive's ZX-81! Shame on you. Let it not happen again!
Adrian Japp



▼ **A ZX Spectrum, not a ZX81 at all of course, as it was labelled in the last issue. Shame on us!**

Yes, well done. For the record, we are all well aware of the differences between Sir Clive's ZX81 and the Spectrum (and indeed the good old ZX80). We're not sure how that slipped through, especially as we had an ex-Sinclair User journo in charge of that sort of thing. Whoops!

Not slavishly addicted

Whilst sorting out a few problems with a friend's Amiga 600 I had cause to buy an Amiga magazine. It has been some time since I last had a reason to read an Amiga mag and I was amused to read the same old comments against the PC. Re: Chris Seward (CU Amiga June 97), "being very stupid indeed and getting a PC just because there's a lot of software available for it".

I take issue with the term "stupid" as I went the PC route after seven years with the Amiga. It was a logical decision based on where the Amiga was going in the hands of Escom or Viscorp (i.e. nowhere). I made my PC with no previous knowledge of 'building' a computer and found it extremely easy.

When are you going to play Tomb Raider or Settlers II or Creatures or any one of a number of other games on your Amiga? When are you going to have such a wealth of educational titles for your children to use? So the Amiga can count word-processing and 3D/Imagine as two of its strengths... Big deal. As for Windows vs. Workbench, I can honestly say that I have no preference. For me they both do/did the job. I would not have been on the Net if it wasn't for the ease with which the PC made joining it (I accept that things may have changed for Amiga owners now but a year or two ago things seemed a lot harder).

It's funny y'know, you don't get PC mags slagging off the Amiga - probably better informed and more tolerant than their Amiga counterparts. As a way of ending let me tell you that it will not be the specs of any new Amiga that will make it a success but the amount (not quality), of software for it. If a new Amiga should appear then I will give it consideration as a replacement for the machines that I now use but only if there are obvious advantages in doing so. I am not slavishly addicted to any computer to the point of blindness.
Mike Fraser via Netland

You don't get PC mags slagging off the Amiga? Why base your rant on a reader's letter and not CU Amiga itself? You wont find us 'slagging off' the PC unless it's on a specific justifiable point in context. So you had no problem building a PC, our readers had no problem building a towered up Amiga system based on our tutorials. You wont see that in a PC magazine. No, you'd find rehashed press releases, uninformed biased reviews of overpriced products and a CD full of hopelessly crippled demo software. You won't be finding the wealth of high quality technical coverage that you neglected to mention in the June issue of CU Amiga that you purchased. As for being better informed, pot, kettle and black are three words that spring to mind if you think the Amiga's applications are limited to word processing and 3D rendering. You cannot even tell how much faster, more efficient and user friendly Workbench is! As for that software, then perhaps you should like to check out the Aminet. What the Amiga lacks in mainstream games and applications, it more than makes up for in the rich variety of very high quality free software. Our final recommendation is that you read that issue of CU Amiga – you just might learn something valuable.

To the Point...

Our annoucement of the forthcoming TFX on the October 97 CD issue of CU Amiga triggered a stream of glowing comments as soon as it was posted on the Internet...

Well done for getting TFX to us. You're the best mag, and this kind of thing will keep your loyal customers. Keep it up!
Richard Bones.

Wow! what a scoop for you guys. I'm all chuffed for you. Next to the buyout of the Amiga, this has to be the cream on the cake for all amiga users worldwide.
David O'Neill

I read with great pride that finally TFX is going to be for available for the Amiga on your October issue of CU.
S de Vries

I'm pleased to see TFX is seeing the light of day. You don't realise how grateful me and other Amiga users are. To date the best flight sim I've played is Tornado by Digital Integration. I've found no other flight sim to come close apart from Digital Integration's F-16 Combat Pilot. I'd just like to say thanks to the CU team for making a dream of mine come true. The hard waiting over the years is now finally through.
Kevin

I know that this is probably not good nettique but I could kiss everybody at CU. What an absolutely fab thing to do. I am counting the minutes until it comes out. Again, well done.
Eddie McGrane

I have an Amiga without a CD-ROM drive, but a PC with one. Can the game be transferred onto floppy disks and then re-assembled on the Amiga's hard drive?
Mike

Yes, it could be done. You'll need to archive some of the files to fit them on a 720K PC formatted disk. Make sure that you have a tool on your Amiga with which to unpack the archives. As another alternative you could use a PC-Amiga link such as Gemini or Network PC

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Points of View

CU Amiga jumps back on the soap box to give you another selection of Amiga related rants and raves!!

At last... a cheap DSP equipped sound card



by Tony Horgan

So the Amiga gets itself an affordable DSP-equipped sound card at last in the shape of CU Amiga's Project XG (see this issue's new DIY slot) – and about time too!

There have been a few quibbles that it's not strictly a 'sound card' in the PC SoundBlaster sense.

Fair enough, it doesn't sample any sounds itself, and you can't use it to re-target your own sample-based mods, but you only need to take a look at what it *does* offer. Better still, hear what it has to offer via the audio demo tracks on this month's CD edition. You'll be blown clean away, I promise.

While Project XG isn't a seamless audio replacement for your existing 8-bit Paula sound, for anything other than sampling this is stunning, not to mention extremely good value for money. What's more, it works with absolutely any Amiga, regardless of its specifications.

If you're still holding out for a drop-in sound upgrade that's going to work with all your software – but better, forget it. It's not going to happen. The closest you'll come to that is the AHI retargettable audio software and a 16-bit sound card

"Project XG is perfect for musicians on a tight budget. There's no need for a mixer, you get an effects unit built in – you don't even need a MIDI interface!"

such as Tocatta or Delfina, but even then your software must have AHI support. Those cards are only available in Zorro card format anyway, which rules out anyone not using a big-box or tower configuration.

Project XG is perfect for musicians on a tight budget. There's no need for a mixer, you get an effects unit built in, and you don't even need a MIDI interface. The widespread use of the General MIDI and XG formats also means GM and XG 'mods' are now popular across all computer formats, so even if you just want to listen to other people's creations, there's no shortage of material out there. I hope you find it useful, whatever you want to do with your Amiga. This is just the first project in our new DIY series, designed to satisfy those who are prepared to customise their machines in order to do exactly what they want.

Of all computer users, Amiga fans are undoubtedly the most individual, so it only follows that the Amiga crowd should set their own adgenda, and not simply follow the rules dictated to them by others. Pardon the old addage but you know what they say – if you want a job done properly: you've got to do it yourself!

■ **Tony Horgan is CU Amiga Magazine's Editor**

Stronger marketing is the way forward

by Philip Bulley.

I'm sure every Amiga user has encountered those nasty little adverts you find every day in the national newspapers saying things like "Top of the range Pentium – Buy now, pay later!". That's all I need first thing in the morning to put me off my breakfast! But you must hand it to them, they've all done extremely well in marketing (or should I say hyping) the products.

They've done well by fooling many into thinking you need to have a high-powered P200, in order to get the best out of simple applications such as word processors and spreadsheets. I even ran into one poorly-educated individual who was convinced it wasn't possible to access the internet without a PC running Windows '95. How sadly mistaken he was.

If I had to mention one advertising campaign that really left a mark in my mind, it would be Windows '95. No one can have failed to notice that famous start button and those clouds – that almost every non-Amiga owning person was dying to get their hands on. Then came along processor giant Intel, with their annoying Intel Inside tune which also got inside millions of minds. Although Amiga users may see these campaigns as uninteresting, the fact remains they do work very well. What's the Amiga had since that advert featuring a mad professor playing on his brand new CD32 many years ago? Virtually nothing! No wonder the Amiga started to fade in the public eye.

"What has the Amiga had since that advert featuring a mad professor playing on his brand new CD32 many years ago? Virtually nothing!"

Amiga games were pushed off the shelves by PC CD-ROMs, and the A1200s were overshadowed by tower PCs. But now, with news of newer, faster, more powerful PPC Amigas on the horizon, will the Amiga ever get back to the top? It certainly won't if it's just accepted quietly by us, the loyal Amiga users.

This time around, Amiga International, and many other companies must put a lot more effort into advertising – and not just in the Amiga press! Promising games developers such as clickBOOM and Vulcan, should also take note or else it'll be a total waste of time porting and creating these killer games to a platform the general public think is dead.

Hopefully in the near future, we'll see a brand new advert hitting our screens, and for the first time in ages, I'll be able to eat my bowl of corn flakes with a smile!

■ **Philip Bulley recently did 2 weeks work experience at CU Amiga**



▲ **Myst, a killer game that the Amiga needs, but will it have the advertising!**

Amiga International won't commit to PowerPC



by Mat Bettinson

It will surprise some of you to know that the great debate on the future Amiga CPU still isn't over. At the time of going to press, Amiga International refused to be committed to the IBM/Motorola PowerPC though they did at least hint it was likely. Their predecessors, Amiga Technologies had committed to the PowerPC, it seems Gateway ordered a rethink.

Others are now proffering the supremo of computing power, the DEC Alpha range of CPUs, as the way the Amiga should go. The fact that this chip is the fastest on the block seems to be the overriding factor in the several camps advocating its use. I certainly wouldn't kick an Alpha based Amiga in the teeth but I don't think it's a realistic option though for a variety of reasons.

Firstly, cost. While Alpha machines have dropped to around the higher end PC price range, the chips and the architecture to support them are very expensive for a low-end – hopefully good value, future Amiga. The power to price ratio is simply not as good as the PowerPC and the lower end of the market is not adequately represented by the Alpha where the PowerPC 603e is just the shot.

Next, the Macintosh and emulation. Under PowerPC real world 100% native PowerPC code can be run while still running AmigaOS. How is one to run 100% native Alpha code unless you want to run Windows NT, and I don't believe any of us do. Imagine, Cinema 4D,

"I certainly wouldn't kick an Alpha based Amiga in the teeth but I don't think it's a realistic option though, for a variety of reasons."

Personal Paint etc. being ported to Alpha? No. Being ported to PowerPC? Yep. Is there an Alpha code C compiler for Amiga? No. PowerPC? Yep, I think you're beginning to get the picture.

Phase 5 have built and shipped to developers the only foreign CPU to be used with the Amiga native. Shortly with a roll out to the public, the PowerUp project has a significant momentum and so the choice of any other CPU is only going to serve to fragment the market. Significant good work has already been performed in porting key parts of the operating system to PowerPC. Amiga International would be insane not to pursue a full PowerPC port of the operating system with the utmost haste.

Criticisms of the PowerPC range revolve around claims that demand and production is suspect with an ailing Apple. May I point out that as PowerPC sales continue to rise, there are three manufacturers of PowerPC chips (SGS Thompson, Motorola and IBM), and the technology is present in a whole range of embedded Microcontrollers which is Motorola's core business. As for incredible levels of CPU performance, check out the posted performance figures and long term plans for the 'G3' PowerPC series – and beyond. Multi-CPU accelerators for the Macintosh exit and PIOS' has plans in this same area. Envisage 4 x 300MHz PPC604e. Holy cow!

Get with the plan, PowerPC is here on Amiga and it should be embraced by one and all!

■ **Mat Bettinson is CU Amiga Magazine's Technical Editor**

The price of performance

by Paul Nolan

Firstly, lets go back in time a year or two. PowerPC is a good choice for the CPU of a next generation Amiga. It has multiple sources, it has a bright future, and there is a wide product range, from cheap low end chips to powerful Intel bashers. Apple's use of PowerPC ensures good availability and volume sales of the chips, which can only be a good thing.

Motorola obviously go way back with the Amiga, and appear willing to help any way they can to get the Amiga to PowerPC. Digital's rival Alpha chip is the fastest in its class, but boy you'll have to pay for that performance.

Now let's fast forward to the present day. PowerPC starts to seem less attractive. The much awaited Exponential PowerPC x704 chip – which promised to push PowerPC beyond the 500MHz barrier, fails to actually offer that much performance and suffers from a deadly lack of interest. Now it ceases to exist!

What of Apple? This week Apple's shares hit their lowest value in twelve years – and they may well not be around in a year's time, which would have a devastating affect on the PowerPC market.

So, if PowerPC isn't looking as attractive as it was two years ago, isn't it sensible to consider the alternatives? Very little, if any, work has been done to port the Amiga's OS. Amiga International would effectively be starting from scratch.

Digital's Alpha chip remains the fastest around, and now reaches 600MHz. The next generation Alpha chip, the 21264 looks set to allow Digital to not only keep a hold on their performance lead, but to extend it dramatically.

Price-wise, you can currently get an Alpha based workstation cheaper than the list price of the Amiga 4000T/060 – and those are using the expensive chips! By the time you read this, the reduced cost version of the Alpha 21164A will be available, with prices significantly cheaper than the Pentium or Pentium II. With that price/performance ratio, and crucially Digital's FX!32 translation technology allowing them to run Intel Windows applications at high speed, you can expect to see the Alpha kick some serious butt.

But, to be honest, whatever chip Amiga International chooses to port Amiga OS to – if indeed they are willing and able to at all, really doesn't matter much.

The work done in porting the OS to one chip means that porting to another chip would be a bit simpler in comparison.

Software developers would have the hardest time, needing to cross compile their code or have another box on their desk. I've become more than just a little bored with PowerPC this, PowerPC that, and would like to thank CU Amiga for letting me explain that there's much more to high performance computing than just PowerPC.

If second best really isn't enough – and having the fastest personal computer around sounds attractive to you, then check out the Siamese System Web site at; http://www.siamese.co.uk – for details of HiQ's Project Alpha.

■ **Paul Nolan is the programmer responsible for Photogenics and the Siamese System software**

"The next generation Alpha chip, the 21264 looks set to allow Digital to not only keep a hold on their performance lead, but to extend it dramatically."



▲ **The Alpha based workstation is cheaper than the list price of the Amiga 400T/060**

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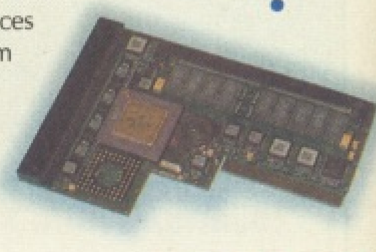
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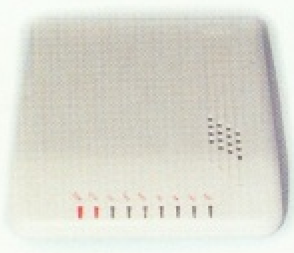
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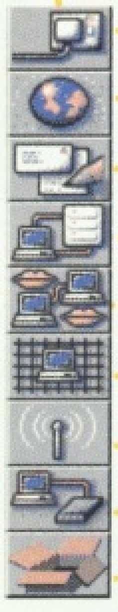
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Issue 2 of our Internet magazine 'Internet Informer' should be available within September. This is a quarterly magazine with the latest information about the Internet and your Amiga - NetConnect users receive this magazine free of charge!

NetConnect v2

NetConnect v2 is even easier to connect to the Internet! Launch the new Wizard GUI, choose your modem, enter a few user details and let the Wizard do all the rest for you! Simple, with version 2 you don't even need to worry about the provider - everything is automatic, everything is point and click! **Amiga Format** concluded about **NetConnect v1** (June 97 issue): "Almost the perfect package for the Amiga Internet user", "If you need to get online, this is the easiest way to do it" and "It's good value for money too - especially the bundle including the 33.6K modem." We have listened to our NetConnect v1 users, noted their comments and added some other new features. NetConnect v2 is available on CD-rom and floppy disk. **Specifications include:**

- **New AmiTCP** - NetConnect v2 users will be the first people to use a version of the new AmiTCP! We have added a number of changes to this new version - the main additions are the new Wizard, MUI based dialler and 'events' control.
- **AmiTCP Wizard** - makes configuring your ISP a doddle. Choose your modem, enter some user details and then the rest of the process is completely automatic! This is true Windows95™ style connectivity! See the two example pictures - point and click Internet configuration!
- **New programs** - NetInfo and X-Arc (X-Arc is a brand new WinZIP™ style archive management tool. Downloads lha/lzx files from Voyager/AmFTP/Microdot-II, auto-extracts them into X-Arc's GUI and allows you to control the files.
- **Programs are now keyfile based** (can be used with any TCP stack - Miami etc)
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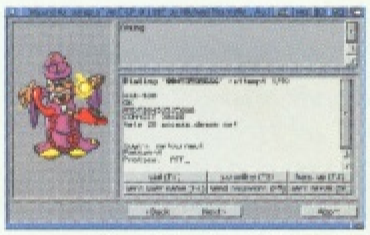
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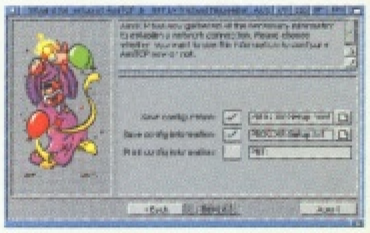
NET INFO
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Wizard - Loginscript Recorder



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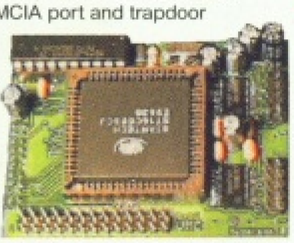
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